

# **GUIDELINES ON REQUIREMENTS FOR ENVIRONMENTAL CLEARANCE FOR ROAD PROJECTS**



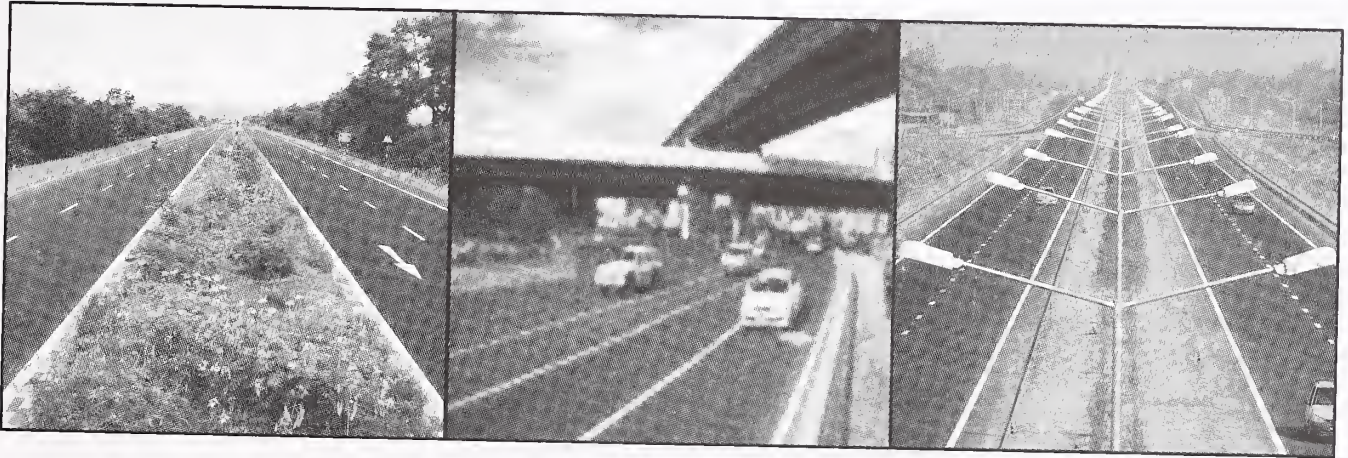
**INDIAN ROADS CONGRESS  
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# GUIDELINES ON REQUIREMENTS FOR ENVIRONMENTAL CLEARANCE FOR ROAD PROJECTS



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## INTRODUCTION

The Guidelines on Requirements for Environmental Clearance for Road Projects was under the consideration of Environment Committee (G-3) since January 2009. The draft was discussed by G-3 Committee in a number of meetings.

The Environment Committee (list of personnel given below) in its meeting held on 10.10.2009 finalized the Guidelines and recommended its submission to General Specifications and Standards Committee (GSS) for their consideration.

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The draft Guidelines were approved by the General Specifications and Standards Committee (GSS) in its meeting held on 27.10.2009 and subsequently by the Executive Committee in its meeting held on 31.10.2009 and authorized the Secretary General, IRC to place the same before Council. The document was approved by the IRC Council in its 189<sup>th</sup> Meeting held on 14.11.2009 at Patna.

## **CHAPTER 1**

# **ENVIRONMENT AND SOCIAL LEGAL FRAMEWORK**

### **1.1 Preamble**

The construction of new roads and/or up-gradation of existing roads is associated with various adverse environmental and social impacts. Construction and operational activities of road projects fall under the purview of various environmental and social regulations promulgated from time to time by the Government of India and the State Governments. Design consultants, contractors, concessionaire and road project implementation agencies need to be aware about the applicable environmental and social regulations and their safeguards, so that design, construction and operation of roads can comply with the applicable regulations. Awareness about applicable environmental and social regulations with respect to road projects helps in timely accordance of necessary clearances/compliances to avoid delay in construction/up-gradation of road. As ready reference for road designers, contractors, concessionaires and project implementation agencies, environmental and social legal requirements for roads/highways are described in following sections.

### **1.2 Environment and Social Legal Framework**

Even before India's Independence in 1947, several environmental and social/resettlement related legislations existed but the real impetus for bringing about a well-developed framework came only after the UN Conference on the Human Environment (Stockholm, 1972). Under the influence of this declaration, the National Council for Environmental Policy and Planning within the Department of Science and Technology was set up in 1972. The Department of Environment was established in 1980 and later evolved into a full-fledged Ministry of Environment and Forests (MOEF) in 1985, which today is the apex administrative body in the country for regulating and ensuring environmental protection. After the Stockholm Conference, in 1976, constitutional sanction was given to environmental concerns through the 42<sup>nd</sup> Amendment, which incorporated them into the Directive Principles of State Policy and Fundamental Rights and Duties.

Since the 1970s an extensive network of environmental legislation has grown in the country. However, legal framework for social aspects was limited to the land acquisition, protection of scheduled areas and backward classes. The following subsections describe relevant legal framework within which the road development works would be designed and implemented.



## **1.3 Enforcement Agencies for Environmental Regulations**

### **1.3.1 *Ministry of Environment and Forests (MOEF)***

The Ministry of Environment and Forests (MOEF) is the key ministry of the Government of India (GOI) responsible for the preparation and implementation of the legislation to mitigate and control environmental pollution. The specific functions of MOEF are as follows:

- environmental policy planning;
- ensure effective implementation of legislation;
- monitoring and control of pollution;
- environmental clearance for industrial and development projects;
- promotion of environmental education, training and awareness; and
- forest conservation and development and wildlife protection.

MOEF, through its six regional offices located in the country, state forest departments and also through Central and State Pollution Control Boards, monitors the conditions stipulated in the clearance letter issued by MOEF, while granting approval to various projects.

In addition to existing protected areas, reserved forests and protected forests, the MOEF can notify certain areas as ecologically sensitive/fragile and all development projects which are to be located in these notified areas need to obtain environmental/statutory clearances. Areas so far notified include some coastal areas identified under the coastal regulation zone notification, forest, wild life sanctuaries, national parks, wet lands, mangroves and ecosensitive zone.

### **1.3.2 *Central Pollution Control Board***

The Central Pollution Control Board (CPCB) basically design the scheme, procedures and standards to control the water, air & noise pollution, land degradation and hazardous substances and waste management. The executive responsibilities for the industrial pollution prevention and control are primarily executed by the CPCB at the Central level, which is a statutory body. The specific functions of CPCB are as follows:

- advise the MOEF on matters concerning prevention, control and abatement of water and air pollution;
- co-ordinate the activities of State Pollution Control Boards (SPCB) and provide them with technical and research assistance;



- prepare manuals, codes and guidelines relating to treatment and disposal of sewage and trade effluents as well as for stacks gas cleaning devices, stacks and ducts;
- establish and keep under review quality standards for surface & groundwater and for air and noise quality;
- planning and execution of national program for the prevention, control and abatement of pollution through the Water and Air Acts; and
- perform such other function as may be prescribed by the Government of India.

### 1.3.3 *State Pollution Control Boards*

The State Pollution Control Board (SPCB)s were constituted to implement the Acts in respective States of the Indian Union. The SPCBs also provides advisory support to the Department of Environment in the States on Environmental Policy matters. The SPCB implements and enforces the policies of the Department of Environment in addition to those formulated by the MOEF. The specific functions of SPCB are as follows:

- planning and execution of State wide program for prevention, control and abatement of water and air pollution;
- advise the State Government on prevention, control and abatement of water and air pollution and siting of industries;
- ensure compliance with the provisions of relevant environmental legislation;
- establish and review local effluent and emission standards;
- ensure legal action against defaulters; and
- develop cost effective methods for treatment, disposal and utilization of effluent.

### 1.3.4 *Coastal Zone Management Authority*

Coastal Zone Management Authorities have been set up both at National and State/ Union Territory levels. The objective of these authorities is to take measures for protecting and improving the quality of coastal environment and preventing, abating and controlling environmental pollution in coastal areas. Highways passing through coastal regulation zones need to take clearance from state coastal zone management authority and the central coastal zone authority.

### 1.3.5 *National Board for Wildlife*

The National Board for Wildlife NBWL is the apex advisory body in the field of wildlife conservation in the country and is headed by the Prime Minister of India.

The NBWL takes decision regarding the impact on wildlife due to road development activities and issues recommendations related to proposed road up-gradation.

**1.3.6** The Archaeological Survey of India (ASI), has been formed for the archaeological researches and protection of the cultural heritage of the nation. Maintenance of ancient monuments and archaeological sites and remains of national importance is the prime concern of the ASI. It regulates all archaeological activities and development works in and around archeological sites in the country as per the provisions of the Ancient Monuments and Archaeological Sites and Remains Act, 1958.

### **1.3.7** *Central Ground Water Board*

In order to have a scientific approach in giving environmental clearance of the industries and infrastructure projects, norms are made for ground water extraction. As a part of regulatory measures by CGWA under EPA 1986 rules and regulations, directions are given to pollution control boards who are having regular monitoring of the industrial pollution including the assessment of land, water and air environment to insist the proper water management by the industries.

## **1.4 Primary Environmental and Social Legal Framework Legislation**

### **1.4.1** *Environmental Legal Framework Legislation*

The Constitution of India directs the State to endeavor to protect and improve the environment and to safeguard the forest and wildlife of the country. Article 51A(g) of the Constitution states that it shall be the duty of every citizen of India to protect and improve the national environment including forests, lakes, rivers and wildlife and to have compassion for living creatures. The language of the Directive principles of the state policy (Article 47) also contains a specific provision, which commits the state to protect the environment. In addition to Constitutional provisions, India has established a comprehensive set of laws for the management and protection of the environment. The Environmental Acts, Notifications, Rules and Amendments applicable for the highway project include the following:

- The Wildlife Protection Act, 1972 and ammended in 2003;
- The Water (Prevention and Control of pollution) Act, 1974;
- The Water (Prevention and Control of Pollution) Act and Rules, 1974, 1975;
- The Water (Prevention and Control of Pollution) Cess Act, 1977;

- The Forest (Conservation) Act 1980, Forest Conservation Rules, 2003;
- The Air (Prevention and Control of Pollution) Act, Rules and Amendment, 1981, 1982, 1983, 1987;
- The Environment (Protection) Act, 1986 with following applicable Rules/Legislations; and Notifications;
- The EIA Notification 2006 and amended in 2009;
- The Coastal Regulation Zone Notification, 1991;
- The National Environment Tribunal Act, 1995;
- The Municipal Solid Waste (Management and Handling) Rules 2000;
- The Biodiversity Act, 2002;
- The Central Ground Water Act
- The Disposal of Flyash Notification, 2008;
- The Hazardous Waste (Management and Handling) Rules 2008;
- Applicable environmental standards as specified by CPCB.

#### **1.4.2** *Other Legal Framework for Road Projects*

- The National Highways Act, 1956;
- The National Highways Rules, 1957 and 1997;
- The National Highways Authority of India Act, 1988;
- The Control of National Highways (Land & Traffic) Act, 2002;
- The State Highways Acts of the State Governments;
- The National Resettlement and Rehabilitation Policy, 2007;
- The Ancient Monuments and Archaeological Sites and Remains Act, 1958;
- The Motor Vehicles Act, 1988;
- The Central Motor Vehicles Rules, 1989;
- The Building and other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Welfare Cess Act, 1996;
- Town Planning Acts of the State Government;
- Ribbon Development Acts of the State Governments;
- Zila Parishad Acts by the State Governments;
- Indian Waterways Authority of India Act, 1985.

## 1.5 Relevant Legal Framework

Legal Framework for Environment and Social Sector is given below:

S.No	Legal Framework	Coordinating Agency	Objectives/Highlights of Framework
<b><i>Environment Legal Framework</i></b>			
1)	Constitution of India, Article 48, 51-A	Government of India	Article 48A of the Directive Principles of State Policy provides for the State's commitment. To protect the environment, Article 51A(g) states that to protect and improve the natural environment shall be the fundamental duty of the citizens of India
2)	The Wildlife Protection Act, 1972	MOEF	Protection of wildlife (wild animals, defined plants and birds) in either National Parks or sanctuaries
3)	The Water (Prevention and Control of pollution) Act, 1974	CPCB, SPCB	Prohibits the discharge of pollutants into water bodies beyond a given standard and lays down penalties for non-compliance.
4)	The Water (Prevention and Control of Pollution) Cess Act, 1977	CPCB, SPCB	Provides for a levy and collection of a cess on water consumed by industries and local authorities.
5)	The Forest (Conservation) Act 1980, Forest Conservation Rules, 1981	MOEF, Regional State Forest Department (SFD)	Restrictions on conversions of Forest for uses other than reforestation, including use for roads.
6)	The Air (Prevention and Control of Pollution) Act, 1981	CPCB, SPCB	Provides means for the control and abatement of air pollution.
7)	The Air (Prevention and Control of Pollution) Rules, 1982	CPCB, SPCB	Defined the procedures for conducting meetings of the boards, the powers of the presiding officers, decision-making etc.



S.No	Legal Framework	Coordinating Agency	Objectives/Highlights of Framework
8)	The Environment (Protection) Act 1986(EPA) followed by amendment	MOEF	Ensure that appropriate measures are taken to conserve and protect the environment before commencement of operations.
8a)	The Environmental Impact Assessment Notification 2009		Identifies highways among other project categories that need environmental clearance from the Central Government in the form of an approved Environmental Impact Assessment (EIA).
8b)	The Coastal Regulation Zone Notification, 1991		Control on development in zone between high and low tide lines, and on lands within 500 m of high tide line.
8c)	The Flyash Notification, 2008		Mandates use of flyash in road construction.
9)	The Environment (Protection) Rules, 1986	MOEF, CPCB & SPCB	Lay down the procedures for setting standards of emission or discharge of environmental pollutants.
10)	The National Environment Tribunal Act, 1995	National Environment Tribunal	To provide for strict liability for damages arising out of any accident occurring while handling any hazardous substance.
11)	The Biodiversity Act, 2002	National Biodiversity Authority/State authorities	To provide for conservation of biodiversity, biodiversity, sustainable use of resources fair and equitable sharing of the benefits from use of resources.
<b>Social Legal Framework</b>			
12)	The Land Acquisition Act, 1894	State Government	Provides for the procedures for acquisition of land for public purposes and for Companies and for determining the amount of compensation to be made on account of such acquisition.
13)	The National Rehabilitation and Resettlement Policy (NRRP), 2007	Ministry of Rural Development	Provide procedures for land acquisition and compensation and settlement for project affected persons.



S.No	Legal Framework	Coordinating Agency	Objectives/Highlights of Framework
14)	The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996, and Welfare Cess Act, 1996	Ministry of Labour and Employment (Director General Welfare)	This Act deals with issues related to conditions of workers and provision of facilities to workers, regarding drinking water, latrines, crèches, canteens, safety, occupational health of construction workers, etc. This Act also prohibits deployment of Child labour on construction work.
<b>Road Sector Legal Framework</b>			
15)	The National Highways, 1956	MORTH*	Provides for declaration of certain highways to be National Highways and for matters connected therewith. Acquisition of Land for National Highway works. Also covers legal framework for private participation.
16)	The National Highways Rules 1957 and National Highways Fee Rules, 2008	MORTH	Procedures for conduct of allocation and use of funds for highway construction. NH rules 2008 have rules for collection of fees on National highway sections.
17)	The National Highways Authority of India Act, 1988	MORTH/National Highways Authority of India (NHAI)	Provides for development, maintenance and management of National Highways by NHAI.
18)	The Control of National Highways (Land & Traffic) Act, 2003	MORTH	Regulates traffic as well as Right of Ways on National Highways
19)	The Motor Vehicles Act, 1988, Central Motor Vehicles Rules, 1989	MORTH/ Department of Police and State Transport Authorities	Development of road transport infrastructure and national highways and overall regulation of freight road transport in the country. To control vehicular air and noise pollution. To regulate development of the transport sector, check and control vehicular air and noise pollution.

\* MORTH: Ministry of Road Transport and Highways

S.No	Legal Framework	Coordinating Agency	Objectives/Highlights of Framework
20)	The Indian Waterways Authority of India Act 1985	Ministry of Shipping/Inland Waterways Authority of India	Empowers the Government to develop waterways for efficient shipping and navigation.
21)	State Highway Acts	State Governments	Development, maintenance and management of State Highways.
22)	Town Planning Acts	State Governments	Control and regulate town Planning activities along the State Highways and other roads
23)	Ribbon Development Acts	State Governments	Control of ribbon development along the State Highways and other roads by State Government.
24)	Zila Parishad Acts	State Governments	
<b><i>Other, Relevant Legal Framework</i></b>			
25)	The Ancient Monuments and Archaeological Sites and Remains Act, 1958	Archaeological Survey of India (ASI)	Provides for the preservation of ancient and historical monuments and archaeological sites and remains of national importance

## 1.6 Description of Key Environmental Legislations

Brief description of key environmental regulations related to road projects is as given below:

### 1.6.1 *The Environment (Protection) Act, 1986*

The Environment (Protection) Act (EPA), 1986, under the jurisdiction of the Indian Ministry of Environment and Forests (MOEF) is officially considered to be the umbrella legislation to regulate environment degradation and pollution. It also attempts to provide a critical framework to enable the coordination of bodies such as Pollution Control Boards set up through air and water related legislations that precede the EPA. The enactment of the EPA is directly linked to the commitments India made at the United Nations Conference on Human Environment held in Stockholm in June, 1972. The EPA

primarily empowers the central government to take measures necessary to protect and improve the quality of environment by setting standards, regulating the siting of industries and so on.

The EPA is less known for its role in environmental protection and prevention of damage through land use planning and safeguarding certain areas against the pressures of commercial exploitation. Section 3(2)(v) of the Act empowers the central government to take all such measures that it deems necessary to protect and improve the quality of the environment and prevent environmental pollution. It allows for the restriction of areas in which certain developmental activities can be prohibited. Further, section 5(1) of the Environment (Protection) Rules (EPR), 1986, specifies certain criteria like topographic and climatic features of an area, biological diversity of the area, environmentally compatible land use, extensive cultivation, proximity to the protected areas, etc. that can be considered while prohibiting or restricting certain operations in different areas.

*Section 3 of the Environment (Protection) Act 1986 (EPA) gives power to the Central Government i.e. the Union Ministry of Environment and Forests to take all measures that it feels are necessary for protecting and improving the quality of the environment and to prevent and control environmental pollution. To meet this objective, the Central Government can restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards [Section 3(2)(v)]*

*Section 5(1) of the Environment (Protection) Rules, 1986 (EPR), states that the central government can prohibit or restrict the location of industries and carrying on certain operations or processes on the basis of considerations like the biological diversity of an area (clause v) maximum allowable limits of concentration of pollutants for an area (clause ii) environmentally compatible land use (clause vi) proximity to protected areas (clause viii).*

### **1.6.2 The Environment (Protection) Rules, 1986**

These rules lay down the procedures for setting standards of emission or discharge of environmental pollutants. The Rules prescribe the parameters for the Central Government, under which it can issue orders of prohibition and restrictions on the location and operation of industries in different areas. The Rules lay down the procedure for taking samples, serving notice, submitting samples for analysis and laboratory reports. The functions of the laboratories are also described under the Rules along with the qualifications of the concerned analysts.



### **1.6.3**    *The Water (Prevention and Control of Pollution) Act and Rules, 1974, 1975*

This Act represented India's first attempt to comprehensively deal with environmental issues. The Act prohibits the discharge of pollutants into water bodies beyond a given standard, and lays down penalties for non-compliance. The Act was amended in 1988 to conform closely to the provisions of the EPA, 1986. It set up the Central Pollution Control Board (CPCB) which lays down Standards for the Prevention and Control of Water Pollution. At the State level, the State Pollution Control Boards (SPCBs) function under the direction of the CPCB and the State Government.

### **1.6.4**    *The Water (Prevention and Control of Pollution) Cess Act, 1977*

This Act provides for a levy and collection of a cess on water consumed by industries and local authorities. It aims at augmenting the resources of the Central and State Boards for prevention and control of water pollution. Following this Act, The Water (Prevention and Control of Pollution) Cess Rules were formulated in 1978 for defining standards and indications for the kind of and location of meters that every consumer of water is required to install.

### **1.6.5**    *The Air (Prevention and Control of Pollution) Act, 1981*

To counter the problems associated with air pollution, ambient air quality standards were established, under the 1981, Act. The Act provides means for the control and abatement of air pollution. The Act seeks to combat air pollution by prohibiting the use of polluting fuels and substances, as well as by regulating appliances that give rise to air pollution. Under the Act, establishing or operation of any industrial plant in the pollution control area requires consent from State Boards. The Boards are also expected to test the air in air pollution control areas, inspect pollution control equipment, and manufacturing processes.

National Ambient Air Quality Standards (NAAQS) for major pollutants were notified by the CPCB in April, 1994 and amended in November, 2009. To empower the Central and State Pollution Boards to meet grave emergencies, the Air (Prevention and Control of Pollution) Amendment Act, 1987, was enacted.

### **1.6.6**    *The Air (Prevention and Control of Pollution) Rules, 1982*

These rules defined the procedures for conducting meetings of the Boards, the powers of the presiding officers, decision-making, the quorum; manner in which the records of the meeting were to be set, etc. They also prescribed the manner and the purpose of seeking assistance from specialists and the fee to be paid to them.

### **1.6.7**    *The Forest (Conservation) Act, 1980*

The Forest (Conservation) Act, 1980 came in to force with effect from October 25, 1980. Under the provisions of this Act, prior approval of the Central Government is essential for diversion of forest lands for the non-forestry purposes. In the national interest and in the interest of future generations, this Act, therefore, regulates the diversion of forest lands to non-forestry purposes. The basic objective of the Act is, to regulate the indiscriminate diversion of forest lands for non-forestry uses and to maintain a logical balance between the developmental needs of the country and the conservation of natural resources/heritage.

### **1.6.8**    *The National Environment Tribunal Act, 1995*

The Act provides strict liability for damages arising out of any accident occurring while handling any hazardous substance and for the establishment of a National Environment Tribunal for effective and expeditious disposal of cases arising from such accident, with a view to give relief and compensation for damages to persons, property and the environment and for the matters connected therewith or incidental thereto.

### **1.6.9**    *The Public Liability Insurance Act, 1991*

The purpose of this act is to provide for public insurance liability for the purpose or providing immediate relief to the persons affected by accident occurring while handling any hazardous substances. The Environment Assessment (EA) confirms that appropriate insurance policy will be taken out. EA identifies hazardous materials associated with the project. The EA document identifies the major accident hazards. Document describes steps to prevent accident hazards and to limit their consequences to the environment. The EA indicates commitment to provide information, training and equipment to ensure worker's safety. EA describes mechanisms to notify the concerned authority in the event a major accident occurs.

### **1.6.10**   *The Forest Conservation Rules, 2003*

These are rules by the Central Government for working and conduct of business outlined under the Forest (Conservation) Act, 1980.

As per the Forest (Conservation) Rules, 2003 proposal involving diversion of forest land upto five hectares other than the proposal relating to mining and encroachments are decided by the Regional Offices of the MOEF.

The Regional Office of MOEF is competent to process, scrutinize and forward decision on proposal involving diversion of more than 5 ha to 40 ha of forest land along with the recommendation (if any), to MOEF, New Delhi.



For proposal involving diversion of more than 40 ha forest land the state Government/ Union Territory would forward the proposal with recommendation to MOEF as per para 2.5(ii) of guidelines issued under Forest (Conservation) Act.

#### **1.6.11 *The Wildlife Protection Act, 1972 and amended 2003***

This Act empowers the Central and State Governments to establish National Parks and Sanctuaries; to formulate rules and designate authorities for the maintenance of National Parks, Sanctuaries and Zoos; to protect and conserve the flora and fauna.

The Circular No 11-9/98-FC dated 4-12-98 issued by the Asst. Inspector General of Forests states that the Ministry of Environment and Forests has taken a decision not to permit development activities inside National Park/Sanctuaries and Tiger reserves areas that are not in consonance of section 29 of the Wild Life (Protection) Act, 1972.

#### **1.6.12 *The Biodiversity Act, 2002***

The Biological Diversity Act, which came into force in February 2003, aims to promote conservation, sustainable use and equitable sharing of benefits of India's biodiversity resources. It provides for establishment of a National Biodiversity Authority at national level, State Biodiversity Boards at State level and Biodiversity Management Committees at the level of Panchayats and Municipalities.

This Act prevents persons undertaking biodiversity related activities without approval from the National Biodiversity Authority. It extends to the whole of India, and approval is required from the National Biodiversity Authority. There are particular restrictions if the Project involves the participation of non-Indian persons. The EA assesses if any biological resource is required for the Project (plants, animals and micro organisms or parts thereof). EA assesses if bio-survey or bio-utilisation is needed for the Project (surveyor collection of species, etc. for any purpose). EA document outlines measure, to avoid or minimize effects on biodiversity.

The National Biodiversity Authority shall play a regulatory role with regard to access to biological resources by foreign citizens and grant of intellectual property rights. It shall play an advisory role in matters relating to the conservation, sustainable use and equitable distribution of biological resources.

#### **1.6.13 *The Municipal Solid Wastes (Management & Handling) Rules, 2000***

The rule describes procedures for collection, segregation, storage, transportation, processing and disposal of municipal solid wastes.

#### **1.6.14** *The Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2009*

The rule requires facilities to classify wastes into different categories and manage them as per the prescribed guidelines and obtain prior authorisation for handling, treatment, storage and disposal of hazardous wastes. Used (Waste) oil from engines and bituminous wastes from hot mix plants are considered as hazardous waste and require hazardous waste authorization from State Pollution Control Board.

#### **1.6.15** *The Noise (Regulation and Control) Rules, 2000*

As a result of considering the deleterious and psychological effects of the noise pollution on the human well-being, MOEF has drawn up the above rules, which have come to force with effect from February 14, 2000. According to the provisions of the rules notified, a person might make a complaint to the designated 'Authority' in the event that the actual noise levels exceed the ambient noise standards by 10dB(A) or more as compared to the prescribed standards. The designated authority will take action against the violator in accordance with the provisions of these rules or other law in force.

The Environment Assessment (EA) identifies all 'industrial', 'commercial', 'residential' and 'silent' zones within the project study area. EA assesses if the levels of noise generated by the project in any area exceeded the ambient air quality standards in respect of noise as specified in the Schedule of the Rules. The EA describes noise pollution control measures to achieve compliance with the ambient noise level.

#### **1.6.16** *The Coastal Regulation Zone Notification, 1991*

Any construction activity within 500 m from high tide line or for crossing back water/ creak has been regulated by Coastal Regulation Zone Notification 1991 under section 3(1) and section 3(2)(v) of the Environment (Protection) Act, 1986 and Rule 5(3)(d) of the Environment (Protection) Rules, 1986 declaring coastal stretches as Coastal Regulation Zone (CRZ) and regulating activities in the CRZ. If a highway project passes within 500 m from high tide line or crosses back water/creak, etc., prior CRZ clearance is required from Coastal Regulation Zone Authorities and MOEF.

#### **1.6.17** *The Fly Ash Notification, 2008*

The main objective of Fly ash Notification, 2008 is to conserve the topsoil, protect the environment and prevent the dumping and disposal of fly ash discharged from coal

based power plants. The fly ash notification makes essential the use of fly ash in road construction activities.

As per Fly ash Notification, 2008, all agencies undertaking construction of roads, flyover bridges and reclamation and compaction of low lying areas, including Ministry of Road Transport and Highways (MORTH), National Highways Authority of India (NHAI), Central Public Works Department (CPWD), State Public Works Departments and other State Government Agencies, shall with immediate effect:

- a) make provisions in their tender documents, schedules of approved materials and rates as well as technical documents for implementation of this notification, including those relating to soil borrow area or pit as per sub-paragraph (7) of paragraph of the above mentioned Fly Ash Notification, 2008.
- b) make necessary specifications or guidelines for road or flyover embankments that are not covered by the specifications laid down by the Indian Roads Congress (IRC).

#### **1.6.18 *Environmental Impact Assessment Notification, 2006 and amended 2009***

The Ministry of Environment and Forests has revised the EIA notification in 2006, and issued the revised EIA notification on 14<sup>th</sup> September, 2006 and its amendment on 1<sup>st</sup> December, 2009.

#### **1.6.19 *Ecologically Sensitive Areas (ESAs)***

Ecologically Sensitive Areas (ESAs) have been identified and notified by the Indian Ministry of Environment & Forests (MOEF) since 1989. Notifications declaring areas as ESAs are issued under the Environment (Protection) Act 1986. The clauses of the EPA which allow for the notification of ESAs hold the possibility of realising landscape-level conservation. In response to a Writ Petition (No. 460) (Goa Foundation v/s Union of India) filed in 2004, the Supreme Court in its order dated December 4, 2006 gave specific directions on declaration of an area of 10 km around Protected Areas as ESAs. The order clearly stated the need to notify the areas within 10 km of the boundaries of wildlife sanctuaries and national parks as Ecologically Sensitive Areas with a view to conserving forests, wildlife and the environment, and to give due regard to the Precautionary Principle.



### **1.6.20** *The Scheduled Tribe and Other Traditional Forest Dwellers (recognition of forest rights) Act, 2006*

The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, recognizes the rights of forest-dwelling Scheduled Tribes and other traditional forest dwellers over the forest areas inhabited by them and provides a framework for according the same.

## **1.7 Key Legislations for Road Projects**

### **1.7.1** *The National Highways Act, 1956*

The National Highways Act, 1956 provides for the declaration of certain highways to be National Highways and for matters connected therewith.

The Government has amended the National Highways Act, 1956 to provide for the legal framework for private sector participation. Under the amended Act, it is possible to: assign to the private entrepreneurs responsibility for implementation and operation of projects for specified period by an agreement with the Government, authorize the entrepreneur to collect and retain the users fee (toll), authorize entrepreneur to regulate traffic on BOT MODE, and punish any person encroaching and misusing the highway developed by the entrepreneur. The Act also provides for acquisition of land required for development of National Highways.

### **1.7.2** *The Control of National Highways (Land and Traffic) Act, 2002*

The Control of National Highways (Land and Traffic) Act, 2002, seeks to regulate traffic as well as the right of way on the National Highways. It provides for prevention of unauthorized occupation of highway land and removal of such encroachment, control of access points to the National Highways, regulation of different types of traffic permitted on the National Highways, control of use of road land for construction of public utilities and drains besides issue of licenses or lease deeds for temporary use of the National Highways. Several Rules have been framed to implement this Act.

### **1.7.3** *The National Highway Rules 1957 and 1997*

The rules outline procedures for conduct of allocation and use of funds for highway construction related activities outlined under the National Highways Act, 1956. The National Highway Fee, 2008 has provision for collection of fees by any person for the

use of section of any National Highways/Permanent Bridges/Temporary Bridges on National Highways.

#### **1.7.4**    *State Highways Acts*

Several States have enacted State Highways Acts for their respective jurisdictions dealing with issues relating to road width, right of way and development schemes. There are similar Acts for Ribbon Development along the roads of different categories and Town Planning Acts, Zila Parishad Acts etc.

#### **1.7.5**    *The National Highways Authority of India Act, 1988*

The Act provides for the constitution of an Authority for the development, maintenance and management of National Highways and matters connected therewith or incidental thereto. The National Highways Authority of India that was constituted under National Highways Authority of India Act, 1988 and made operational in February, 1995.

#### **1.7.6**    *The Land Acquisition Act, 1894*

The Land Acquisition Act (LA Act) of 1894, last amended in 1984, provides for the acquisition of land for public purposes and for Companies and for determining the amount of compensation to be made on account of such acquisition. As per the LA Act, the District Collector will function as the Land Acquisition Officer on behalf of the Government.

#### **1.7.7**    *National Rehabilitation and Resettlement Policy, 2007*

Department of Land Resources, Ministry of Rural Development has formulated a National Rehabilitation and Resettlement Policy (NRRP) in 2007. As per NRRP, 2007, in case of linear acquisitions, in projects relating to highways wherein only a narrow stretch of land is acquired for the purpose of the project or is utilised for right of way, each khatedar in the affected family shall be offered by the requiring body an ex-gratia payment of such amount as the appropriate Government may decide, but not less than twenty thousand rupees, in addition to the compensation or any other benefits due under the Act or programme or scheme under which the land, house or other property is acquired: Provided that, if as a result of such land acquisition, the land-holder becomes landless or is reduced to the status of a "small" or "marginal" farmer, other rehabilitation and resettlement benefits available under this policy shall also be extended to such affected family.



### **1.7.8** *The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996 and Welfare Cess Act, 1996*

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act came into force on the 1<sup>st</sup> day of March, 1996. It applies to every establishment which employs, or had employed on any day of the preceding twelve months, ten or more building workers in any building or other construction work. This Act deals with issues related to payment of wages, facilities to workers, regarding drinking water, latrines, crèches, canteens, safety, occupational health of construction workers, etc. The Welfare Cess Act, 1996 covers levy of one percent cess on all construction works including roads. The proceeds of the levy are used for welfare of workers. The fund is managed by the State Construction Workers Welfare Boards under the Department of Labour & Welfare.

## **1.8 Other Relevant Key Legislations for Road Project**

### **1.8.1** *The Motor Vehicles Act, 1988*

In 1988, the Indian Motor Vehicles Act was enacted to empower the State Transport Authority to enforce standards for vehicular pollution and prevention control. The authority checks emission standards of registered vehicles, collect road taxes and issues licenses besides ensuring proper packaging, labeling and transportation of hazardous wastes. The Act is under consideration of Government for further amendments.

### **1.8.2** *The Central Motor Vehicles Rules, 1989*

The rules provide for working rules for licensing of drivers of motor vehicles, registration of motor vehicles, control of transport vehicles, construction equipment and maintenance of motor vehicles, overall dimensions of motor vehicles, rules of road regulations, etc.

### **1.8.3** *The Indian Waterways Authority of India Act, 1985*

The Inland Waterways Authority of India (IWAI) Act, 1985 empowers the Government to declare waterways with potential for development of shipping and navigation as National Waterways and develop such waterways for efficient shipping and navigation. This Act empowers the Authority to provide or permit setting up of infrastructure facilities

for national waterways. IWA clearance is required when road project passes National Waterways.

#### **1.8.4**    *The Ancient Monuments and Archaeological Sites and Remains Act, 1958*

This Act provides for the preservation of ancient and historical monuments and archaeological sites and remains of national importance, for the regulation of archaeological excavations and for the protection of sculptures, carvings and other like objects. The Act empowers the Central Government to declare/acquire rights of a protected monument, preserve it and also protect antiquities. According to this Act, area within radii of 100 m and 300 m from the "protected property" are designated as "protected area" and "controlled area" respectively. No development activity (including building, mining, quarrying, blasting) is permitted in the "protected area" and development activities likely to damage the protected property are not permitted in the "controlled area" without prior permission of the Archaeological Survey of India (ASI) if the site/remains/monuments are protected by ASI or the State Department of Archeology, if these are protected by the State.

### **1.9**       **Various Clearance Requirements for Road Projects**

#### **1.9.1**    *Clearance Requirements for Road Projects at Design Stage*

- Environmental Clearance is required for Categories A and B1 Road projects of schedule-1 under EIA Notification 2009
- "Consent to Establish" under the Air Act and Water Act
- "Consent to Operate" under the Air Act and Water Act
- CRZ clearance in coastal areas - CRZ notification if the project area fall under CRZ-I, II,III and IV
- Forest clearance (if forest area to be diverted for the project, including notified roadside plantations) under the Forest Conservation Act
- Wildlife clearance from Hon'ble Supreme Court in notified wildlife areas
- Clearance from the Inland Waterways Authority in case of National waterway.
- NOC from Central Ground Water Authority for drawing ground water in notified blocks
- NOC from ASI for any construction/operation within radius of 1 Km.
- NOC from the Chief Wildlife Warden for crossing the identified migratory corridors of wild animals.

**1.9.2** *Clearance Requirements for Road Projects at Pre-Construction Stage by Contractors*

- Consent to Establish from State Pollution Control Board under the Air Act and Water Act for Hot Mix Plant and Aggregate quarry
  - Consent to Operate from State Pollution Control Board under the Air Act and Water Act for Hot Mix Plant and Aggregate quarry
  - Hazardous Waste Authorisation under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2009, from State Pollution Control Board
  - Tree cutting permission under the relevant State level regulations.
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## CHAPTER 2

### PROCEDURE FOR OBTAINING ENVIRONMENTAL CLEARANCE

#### 2.1 General Condition (GC)

The process of obtaining environmental clearance for road projects has been described in EIA Notification 2006. The categorisation of road project requiring environmental clearance has also been clearly defined in the said notification and its amendment 2009. The 'new highway projects'; and the highway projects of more than 30 km length involving widening of the existing road alignment through acquisition of more than 20 m land will require prior Environmental Clearance from MOEF/SEIAA.

As per EIA Notification, 2006, any new project and/or expansion/modernisation of any activity shall not be undertaken in any part of India unless it is accorded environment clearance by the Central Government in accordance with procedure specified in this notification. As per the procedure, anybody that desires require construction of new projects or activities or the expansion or modernisation of the existing projects or activities listed in the schedule of this notification entailing capacity addition with change in process or technology shall be undertaken in any part of India only after the prior environment clearance from the Central Government or as the case may be, by the State level Environment Impact Assessment Authority (SLEIAA), duly constituted by the Central Government under sub-section (3) of section 3 of the Environment Protection Act, in accordance with the procedure specified hereinafter in this notification.

##### 2.1.1 *Requirements of Prior Environmental Clearance (EC)*

The projects or activities shall require prior environmental clearance from the concerned regulatory authority, for matters falling under Category 'A' in the Schedule and at State level the State Environment Impact Assessment Authority (SEIAA) for matters falling under Category 'B' in the said Schedule, before any construction work, or preparation of land by the project management except for securing the land, is started on the project or activity:

- i) All new projects or activities listed in the Schedule of EIA Notification, 2006 and amendment 2009;
- ii) Expansion and modernization of existing projects or activities listed in the Schedule to this notification with addition of capacity beyond the limits specified for the concerned sector, i.e. projects or activities which cross



the threshold limits given in the Schedule, after expansion or modernization;

- iii) Any change in product - mix in an existing manufacturing unit included in Schedule beyond the specified range.

### 2.1.2 *Categorisation of Projects and Activities*

- i) All projects and activities are broadly categorized in to two categories - Category 'A' and Category 'B', based on the spatial extent of potential impacts and potential impacts on human health and natural and man made resources.
- ii) All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MOEF) on the recommendations of an Expert Appraisal Committee (EAC) to be constituted by the Central Government for the purposes of this notification;
- iii) All projects or activities included as Category 'B' in the Schedule, including expansion and modernization of existing projects or activities as specified in sub paragraph (ii) of paragraph 2, or change in product mix as specified in sub paragraph (iii) of paragraph 2, but excluding those which fulfill the General Conditions (GC) stipulated in the Schedule, will require prior environmental clearance from the State/Union territory Environment Impact Assessment Authority (SEIAA). The SEIAA shall base its decision on the recommendations of a State or Union territory level Expert Appraisal Committee (SEAC) as to be constituted for in this notification.

**Highway projects which come under category 7 (f) of EIA Notification, 2006, following criteria were fixed:**

Project or Activity		Category with Threshold Limit	Category with Threshold Limit	Condition, if any
		A	B	
7f)	Highways	i) New National High ways; and ii) Expansion of National Highways greater than 30 KM, involving additional right of way greater than 20 m involving land acquisition and passing through more than one State.	i) New State Highways; and ii) Expansion of National / State Highways greater than 30 km involving additional right of way greater than 20 m involving land acquisition.	General Condition shall apply  Any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 10 km from the boundary of: i) Protected Areas notified under the Wild Life (Protection) Act, 1972,

				ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, iii) Notified Eco-sensitive areas, iv) inter-State boundaries and international boundaries
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**Following amendment of EIA Notification, 2006 has been done for Highway Project in the year 2009**

Project or Activity		Category with Threshold Limit	Category with Threshold Limit	Condition, if any
		A	B	
7f)	Highways	i) New National Highways; and ii) Expansion of National Highways greater than 30 KM, involving additional right of way greater than 20 m involving land acquisition and passing through more than one State.	All State highway projects and State Highway Expansion projects in hilly terrain or in ecologically sensitive area	General Condition shall apply Any project or activity specified in Category 'B' will be treated as Category A, if located in whole or in part within 10 km from the boundary of: i) Protected Areas notified under the Wild Life (Protection) Act, 1972, ii) Critically Polluted areas as notified by the Central Pollution Control Board from time to time, iii) Notified Eco-sensitive areas, iv) inter-State boundaries and international boundaries

The Category 'A' projects shall be appraised by the MOEF, and the Category 'B' projects by a duly constituted State Environment Impact Assessment Authority (SEIAA). All National Highway projects included as Category 'A' in the above Schedule shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forests (MOEF) on the recommendations of Expert Appraisal Committee (EAC).

## 2.2 Procedure for Environment Clearance

The Procedure for obtaining prior Environment Clearance for Highway Projects is as under:

The project proponent will submit Application to MOEF for Category 'A' projects and to the SEIAA for Category 'B' projects in prescribed **Form 1 (Annex III)** including Proposed Terms of Reference for carrying out EIA along with Feasibility Report before commencing any construction activity or preparation of land at site by the applicant.

The Process can best be divided into four stages:

- Screening [Only For Category B Projects]
- Scoping
- Public Consultation
- Appraisal

### **2.2.1 Screening (Stage I)**

In case of Category 'B' projects or activities, this stage will entail the scrutiny of an application seeking prior environmental clearance made in Form 1 by the concerned State level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of an Environmental Impact Assessment (EIA) for its appraisal prior to the grant of environmental clearance depending upon the nature and location specificity of the project. The projects requiring an Environmental Impact Assessment report shall be termed Category 'B1' and remaining projects shall be termed Category 'B2' and will not require an Environment Impact Assessment report.

### **2.2.2 Scoping (Stage II)**

The expert appraisal committee (under MOEF or SEIAA) on the basis of:

- Information furnished by the applicant in the form 1 including proposed terms of reference
- A site visit by a sub group of Expert Appraisal Committee only if considered necessary by the Expert Appraisal Committee
- Will determine the detailed comprehensive Terms of Reference (TOR) addressing all relevant environmental concerns for the preparation of Environment Impact Assessment
- The Terms of Reference (TOR) will be conveyed to the applicant by the Expert Appraisal Committee within sixty days of the receipt of Form1 and other documents
- If the terms of reference are not finalized and conveyed to the applicant within Sixty days of the receipt of the Form1 and other documents. The Terms of Reference suggested by the Applicant will be deemed as final Terms of Reference for carrying out Environment Impact Assessment Studies. The approved Terms of Reference will be displayed on the website of Ministry of Environment and Forest.



Application for prior environment clearance may be rejected by the regulatory authority concerned on the recommendation of Expert Appraisal Committee concerned at this stage itself. In case of such rejection the decision together with reasons for the same will be communicated to the applicant in writing within sixty days of the receipt of application.

### **2.2.3** *Public consultation (Stage III)*

- i) "Public Consultation" refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category 'A' and Category 'B1' projects or activities shall undertake Public Consultation, except the following:-
  - a) modernization of irrigation projects (item 1(c) (ii) of the Schedule).
  - b) all projects or activities located within industrial estates or parks (item 7(c) of the Schedule) approved by the concerned authorities, and which are not disallowed in such approvals.
  - c) expansion of Roads and Highways (item 7 (f) of the Schedule) which do not involve any further acquisition of land.
  - d) all Building/Construction projects/Area Development projects and Townships (item 8).
  - e) all Category 'B2' projects and activities.
  - f) all projects or activities concerning national defence and security or involving other strategic considerations as determined by the Central Government.

The Public Hearing shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site(s) or in its close proximity District-wise, by the concerned State Pollution Control Board (SPCB) or the Union Territory Pollution Control Committee (UTPCC).

### **The Process:**

The Applicant shall make a request through a simple letter to the Member Secretary of the SPCB or Union Territory Pollution Control Committee, in whose jurisdiction the project is located, to arrange the public hearing within the prescribed statutory period. In case the project site is extending beyond a State or Union Territory, the public hearing



is mandated in each State or Union Territory in which the project is sited and the Applicant shall make separate requests to each concerned SPCB or UTPCC for holding the public hearing as per this procedure.

The Applicant shall enclose with the letter of request, atleast 20 hard copies and an equivalent number of soft (electronic) copies of the draft EIA Report with the generic structure given in MOEF website including the Summary Environment Impact Assessment report in English and in the local language, prepared strictly in accordance with the Terms of Reference communicated after Scoping (Stage-2). Simultaneously the applicant shall arrange to forward copies, one hard and one soft, of the above draft EIA Report along with the Summary EIA report to the Ministry of Environment and Forests and to the following authorities or offices, within whose jurisdiction the project will be located:

- a) District Magistrate/s
- b) Zila Parishad or Municipal Corporation
- c) District Industries Office
- d) Concerned Regional Office of the Ministry of Environment and Forests

On receiving the draft Environmental Impact Assessment report, the above mentioned authorities except the MOEF, shall arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities. They shall also make available the draft EIA Report for inspection electronically or otherwise to the public during normal office hours till the Public Hearing is over. The Ministry of Environment and Forests shall promptly display the Summary of the draft Environmental Impact Assessment report on its website, and also make the full draft EIA available for reference at a notified place during normal office hours in the Ministry at Delhi.

The SPCB or UTPCC concerned shall also make similar arrangements for giving publicity about the project within the State/Union Territory and make available the Summary of the draft Environmental Impact Assessment Report (Appendix III A) for inspection in select offices or public libraries or panchayats etc. They shall also additionally make available a copy of the draft Environmental Impact Assessment report to the above five authorities/offices viz, Ministry of Environment and Forests, District Magistrate etc.

### **Notice of Public Hearing**

The Member-Secretary of the concerned SPCB or UTPCC shall finalize the date, time and exact venue for the conduct of public hearing within 7(seven) days of the date of receipt of the draft Environmental Impact Assessment report from the project proponent,

and advertise the same in one major National Daily and one Regional vernacular Daily. A minimum notice period of 30(thirty) days shall be provided to the public for furnishing their responses;

The advertisement shall also inform the public about the places or offices where the public could access the draft Environmental Impact Assessment report and the Summary Environmental Impact Assessment report before the public hearing.

No postponement of the date, time, venue of the public hearing shall be undertaken, unless some untoward emergency situation occurs and only on the recommendation of the concerned District Magistrate the postponement shall be notified to the public through the same National and Regional vernacular dailies and also prominently displayed at all the identified offices by the concerned SPCB or Union Territory Pollution Control Committee;

In the above exceptional circumstances fresh date, time and venue for the public consultation shall be decided by the Member-Secretary of the concerned SPCB or UTPCC only in consultation with the District Magistrate and notified afresh.

### **The Panel**

The District Magistrate or his or her representative not below the rank of an Additional District Magistrate assisted by a representative of SPCB or UTPCC, shall supervise and preside over the entire public hearing process.

### **Videography**

The SPCB or UTPCC shall arrange to video film the entire proceedings. A copy of the videotape or a CD shall be enclosed with the public hearing proceedings while forwarding it to the Regulatory Authority concerned.

### **Proceedings**

The attendance of all those who are present at the venue shall be noted and annexed with the final proceedings.

There shall be no quorum required for attendance for starting the proceedings.

A representative of the applicant shall initiate the proceedings with a presentation on the project and the Summary EIA report.

Every person present at the venue shall be granted the opportunity to seek information or clarifications on the project from the Applicant. The summary of the public hearing

proceedings accurately reflecting all the views and concerns expressed shall be recorded by the representative of the SPCB or UTPCC and read over to the audience at the end of the proceedings explaining the contents in the vernacular language and the agreed minutes shall be signed by the District Magistrate or his or her representative on the same day and forwarded to the SPCB/UTPCC concerned.

A Statement of the issues raised by the public and the comments of the Applicant shall also be prepared in the local language and in English and annexed to the proceedings.

The proceedings of the public hearing shall be conspicuously displayed at the office of the Panchyats within whose jurisdiction the project is located, office of the concerned Zila Parishad, District Magistrate, and the SPCB or UTPCC . The SPCB or UTPCC shall also display the proceedings on its website for general information. Comments, if any, on the proceedings which may be sent directly to the concerned regulatory authorities and the Applicant concerned.

### **Time period for completion of Public Hearing**

The public hearing shall be completed within a period of 45 (forty five) days from date of receipt of the request letter from the Applicant. Therefore the SPCB or UTPCC concerned shall sent the public hearing proceedings to the concerned regulatory authority within 8(eight) days of the completion of the public hearing .The applicant may also directly forward a copy of the approved public hearing proceedings to the regulatory authority concerned along with the final Environmental Impact Assessment report or supplementary report to the draft EIA report prepared after the public hearing and public consultations.

If the SPCB or UTPCC fails to hold the public hearing within the stipulated 45(forty five) days, the Central Government in Ministry of Environment and Forests for Category 'A' project or activity and the State Government or Union Territory Administration for Category 'B' project or activity at the request of the SEIAA, shall engage any other agency or authority to complete the process, as per procedure laid down in this notification.

#### **2.2.4 Appraisal (Stage IV)**

Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the Final EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance. This appraisal shall be made by Expert Appraisal



Committee or State Level Expert Appraisal Committee concerned in a transparent manner in a proceeding to which the applicant shall be invited for furnishing necessary clarifications in person or through an authorized representative. On conclusion of this proceeding, the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.

The appraisal of all projects or activities which are not required to undergo public consultation, or submit an Environment Impact Assessment report, shall be carried out on the basis of the prescribed application Form 1 and Form 1A as applicable, any other relevant validated information available and the site visit wherever the same is considered as necessary by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

The appraisal of an application be shall be completed by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within sixty days of the receipt of the final Environment Impact Assessment report and other documents or the receipt of Form 1 and Form 1 A, where public consultation is not necessary and the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee shall be placed before the competent authority for a final decision within the next fifteen days.

#### **2.2.5**    *Grant or Rejection of Prior Environmental Clearance (EC)*

The regulatory authority shall consider the recommendations of the EAC or SEAC concerned and convey its decision to the applicant within forty five days of the receipt of the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned or in other words within one hundred and five days of the receipt of the final Environment Impact Assessment Report, and where Environment Impact Assessment is not required, within one hundred and five days of the receipt of the complete application with requisite documents, except as provided below.

The regulatory authority shall normally accept the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned. In cases where it disagrees with the recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, the regulatory authority shall request reconsideration by the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned within forty five days of the receipt of the recommendations of



the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned while stating the reasons for the disagreement. An intimation of this decision shall be simultaneously conveyed to the applicant. The Expert Appraisal Committee or State Level Expert Appraisal Committee concerned, in turn, shall consider the observations of the regulatory authority and furnish its views on the same within a further period of sixty days. The decision of the regulatory authority after considering the views of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be final and conveyed to the applicant by the regulatory authority concerned within the next thirty days.

In the event that the decision of the regulatory authority is not communicated to the applicant within the period specified as mentioned above, as applicable, the applicant may proceed as if the environment clearance sought for has been granted or denied by the regulatory authority in terms of the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned.

On expiry of the period specified for decision by the regulatory authority as above, as applicable, the decision of the regulatory authority, and the final recommendations of the Expert Appraisal Committee or State Level Expert Appraisal Committee concerned shall be public documents.

Clearances from other regulatory bodies or authorities shall not be required prior to receipt of applications for prior environmental clearance of projects or activities, or screening, or scoping, or appraisal, or decision by the regulatory authority concerned, unless any of these is sequentially dependent on such clearance either due to a requirement of law, or for necessary technical reasons.

Deliberate concealment and/or submission of false or misleading information or data which is material to screening or scoping or appraisal or decision on the application shall make the application liable for rejection, and cancellation of prior environmental clearance granted on that basis. Rejection of an application or cancellation of a prior environmental clearance already granted, on such ground, shall be decided by the regulatory authority, after giving a personal hearing to the applicant, and following the principles of natural justice.

#### **2.2.6**    *Validity of Environmental Clearance (EC)*

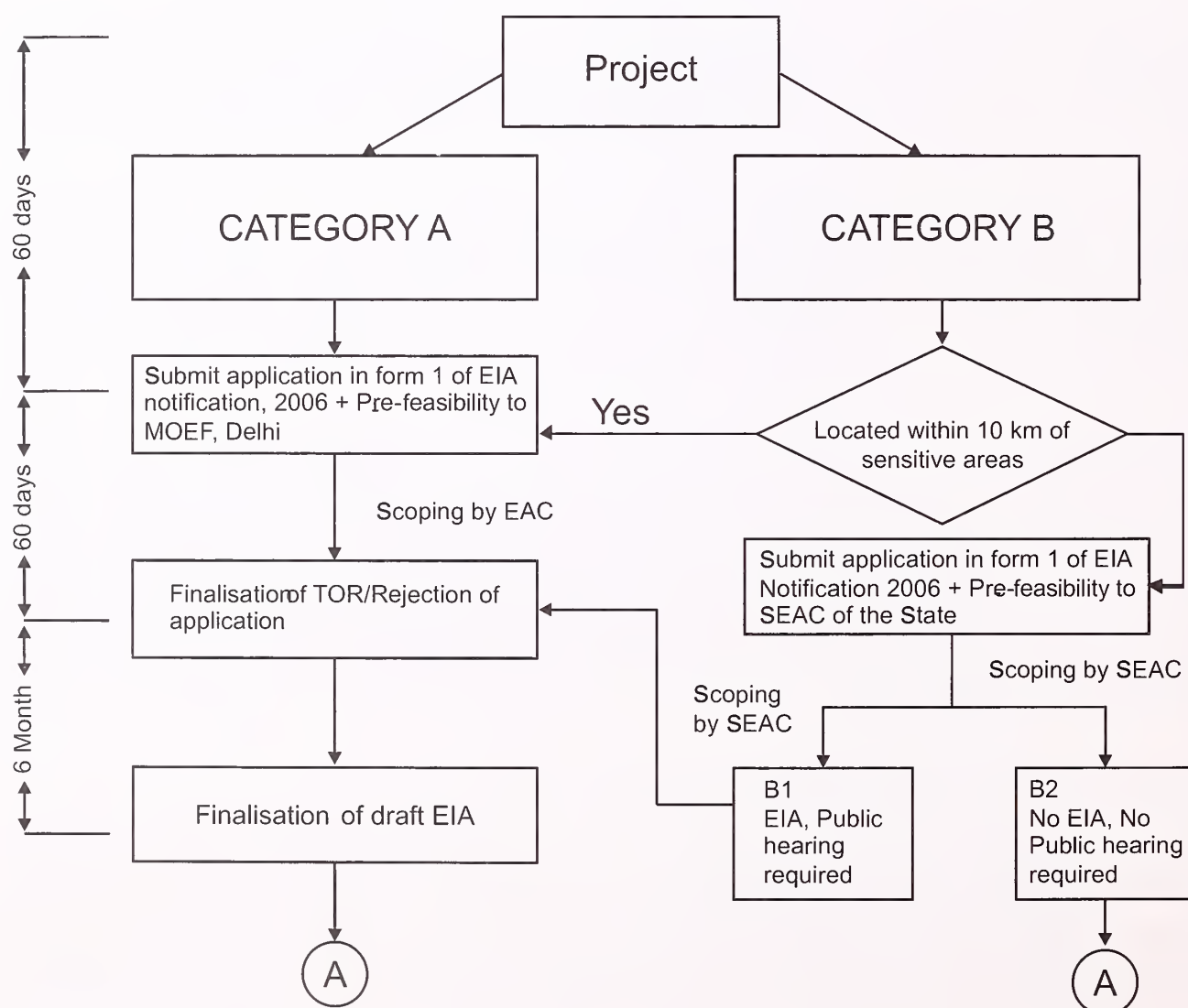
The "Validity of Environmental Clearance" is meant the period from which a prior environmental clearance is granted by the regulatory authority, or may be presumed by the applicant to have been granted to the start of production operations by the project or activity, or completion of all construction operations in case of construction projects to which the application for prior environmental clearance refers.

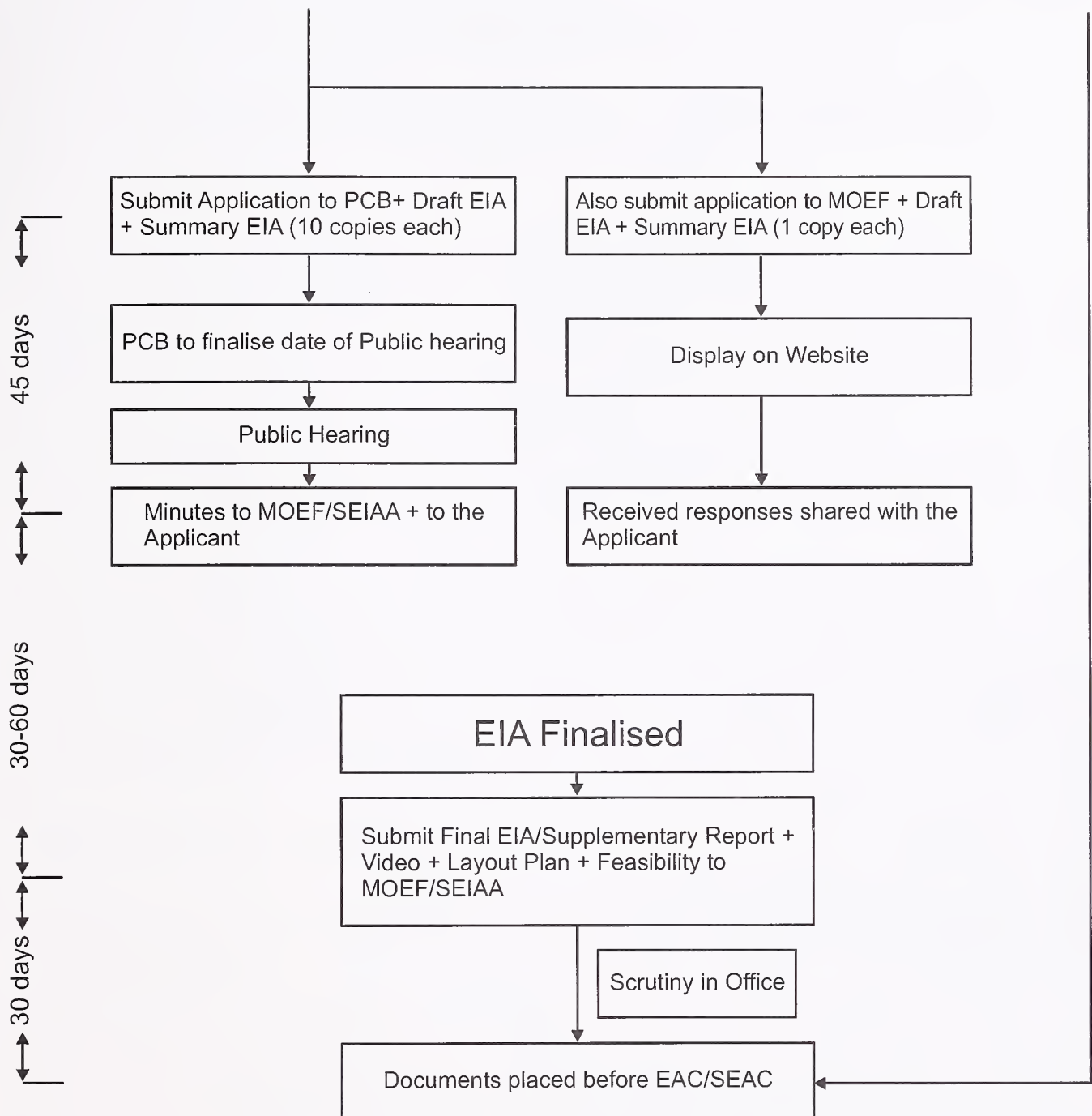
### 2.2.7 Post Environmental Clearance Monitoring

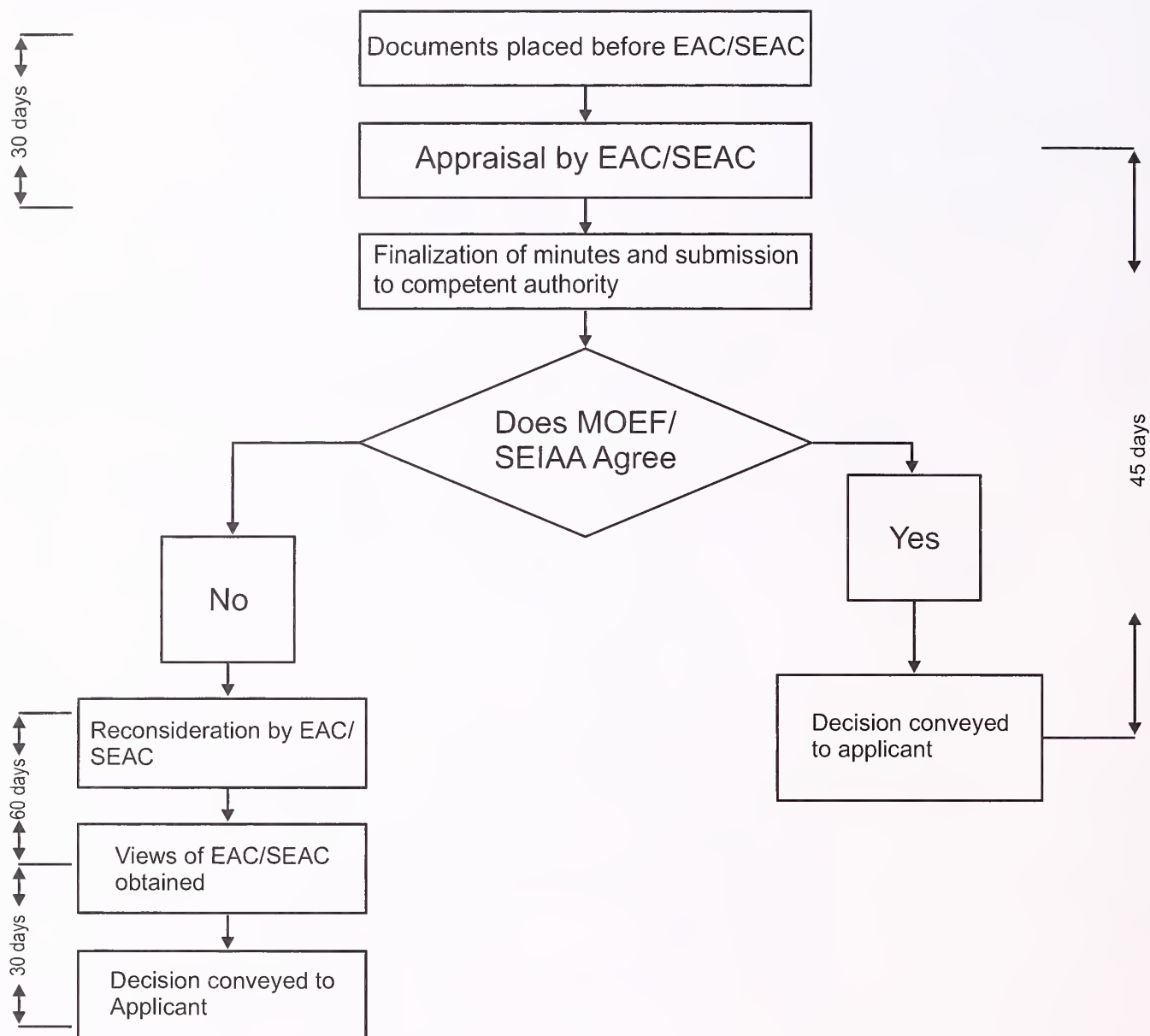
It shall be mandatory for the project management to submit half-yearly compliance reports in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1<sup>st</sup> June and 1<sup>st</sup> December of each calendar year.

All such compliance reports submitted by the project management shall be public documents. Copies of the same shall be given to any person on application to the concerned regulatory authority. The latest such compliance report shall also be displayed on the website of the concerned regulatory authority.

### 2.2.8 Flow Chart: Procedure for Obtaining Environmental Clearance









## CHAPTER 3

### PROCEDURE FOR OBTAINING FOREST CLEARANCE

#### 3.1 Forest Clearance

When highway project involves use of forest land, clearance for diversion of forest land is necessary from State Government and then from Ministry of Environment & Forests (MOEF) under Forest (Conservation) Act, 1980. In J&K State, diversion of forest land is done under Jammu & Kashmir Forest (Conservation ) Act, 1992.

As per the Forest (Conservation) Rules, 2003 proposal involving diversion of forest land upto five hectares other than the proposal relating to mining and encroachments are decided by the Regional Office of the MOEF.

The regional offices of MOEF are also empowered to process, scrutinize and forward diversion proposal of more than five hectares and upto forty hectares, along with the recommendations, if any, to the Ministry of Environment and Forests, Paryavaran Bhawan, Lodi Road, New Delhi. For proposals involving diversion of more than 40 hectares of forest land, the State Government/Union Territory administration would forward the proposal with recommendations to MOEF.

#### State Department of Forests

The State Departments of Forests forwards the proposal with recommendations regarding diversion of forest land in its jurisdiction to the MOEF for in-principle approval and final clearance.

#### Procedure for diversion of forest land:

- Application (**Annex IV**) submitted to the State Govt.
- State Govt. recommends the case to the MOEF
- Upto 5 ha clearance issued by MOEF Regional Office.
- 5-40 ha, processed by R.O. but issued by MOEF Delhi
- 40 ha processed and approved by MOEF Delhi based on the recommendation of FAC

#### Two Stage Process

Road projects are considered in entirety. This means that a road stretch for which DPR is prepared, shall be considered as one project, whether it is passing through

one or more districts (As per circular issued by MOEF, 2006 - Available on MOEF Website).

**I) First Stage Clearance**

- In-principle approval
- Conditions specified
- Deposit Net Present Value of Forest (5.80 to 9.20 lakhs/ha)
- Deposit Money for Compensatory Afforestation
- Plant atleast double the number of trees felled
- Submit Plan for afforestation
- Provide land for land (not in centrally sponsored projects)
- No activity allowed until final clearance accorded
- State can stipulate additional conditions

**II) Second Stage Clearance**

- After fulfillment of stipulated conditions
- Permission is required under local state laws for cutting of trees, in any case.
- Compensatory afforestation

### **3.2 Obtaining Forest Clearance Under the Forest (Conservation) Act, 1980**

#### **3.2.1 Two-Stage Process**

The stature for forest diversion requires the diversion to be done in two stages. At State-I (that is, the 'in-principle approval' stage, the proposal is either agreed to or rejected after being thoroughly examined by the regional offices (upto to 5 ha), State Advisory Group (SAG) (5 to 40 ha), and Forest Advisory Committee (more than 40 ha). If agreed to, certain conditions, largely relating to payment of appropriate opportunity costs and expenses towards mitigating the environmental damages of diversion of forest land are stipulated, which are required to be fulfilled by the project authorities. Prominent conditions among these include:

- Net Present Value (NPV) or the quantification of the environmental services provided for the forest area diverted to non-forestry uses as determined by the Central Government from time to time by appointing an expert committee;
- Identification of non-forest land for Compensatory Afforestation (CA) and payment of cost towards CA, or afforestation done in lieu of the diversion of forest land for non-forestry use under the Forest (Conservation) Act, 1980;

- Cost of Penal Compensatory Afforestation or afforestation work to be undertaken over and above the prescribed compensatory afforestation under the Forest (Conservation) Act, 1980 in lieu of the extent of area over which non-forestry activities have been carried out without obtaining prior approval of the competent authority under the Forest (Conservation) Act, 1980; and
- Other expenses towards mitigating the environmental damages including catchment area treatment, wildlife preservation, biodiversity conservation, and rehabilitation of displaced persons, if any.

After receipt of Compliance Report, fulfilling the conditions stipulated in Stage-I (in-principle approval) from the user agencies through the respective State/UT Governments, Stage-II clearance is accorded by the Government of India. Following this, the project authorities are handed over the forest land for non-forestry use, provided they also have other requisite clearances.

### **3.3 Seeking Forest Clearance Under Forest (Conservation) Rules, 2003**

Every user agency, that wants to use any forest land for non-forest purposes, is required to make its proposal in the appropriate form, that is, Form 'A' to the concerned Nodal Officer along with requisite information and documents, complete in all respects, well in advance of taking up any non-forest activity on the forest land.

Every State Government or other authority, after having received the proposal and after being satisfied that the proposal requires prior approval under section 2 of the Forest (Conservation) Act, shall send the proposal to the Central Government in the appropriate forms, within 90 days of the receipt of the proposal from the user agency for proposals seeking first time approval under the Act.

The proposal referred to in sub-rule (2) of Forest (Conservation) Act, involving forest land upto 40 hectare shall be sent to the Chief Conservator of Forests or Conservator of Forests of the concerned Regional Office of the Ministry of Environment and Forests.

The proposal referred to sub-rule (2) of Forest (Conservation) Act, involving clearing of naturally grown trees in forest land or portion thereof for the purpose of using it for reafforestation shall be sent to the Chief Conservator of Forests or Conservator of Forests of the concerned Regional Office of the Ministry of Environment and Forests.

#### **Other Provisions:**

The Supreme Court of India, vide its various orders as given below directed the Central Government to follow certain procedures for according forest clearance:

- 1) Vide its Order dated 13<sup>th</sup> November, 2002 in WP (Civil) No.337 of 1995, the Supreme Court of India banned de-reservation of forests/sanctuaries/national Parks except with the approval of the Supreme Court.



- 2) The MOEF moved the Supreme Court of India for deletion of the word 'forests' from the above order, dated 13<sup>th</sup> November, 2000 in WP (Civil) No.337 of 1995 through an Interlocutory Application (IA) No.16. However, the Supreme Court of India on 9<sup>th</sup> February, 2004 disallowed the request of the Ministry stating that 'We see no ground to allow the application and delete the word "forests" from the order dated 13<sup>th</sup> November, 2000. The application is accordingly dismissed'.
- 3) The Supreme Court of India vide its orders dated 23<sup>rd</sup> November, 2001 in IA No.703 in WP (Civil) No.202 of 1995, restrained the Union of India from permitting regularisation of any encroachments whatsoever without their approval.

In addition to the above, a general approval has been given to the State Governments for according approval upto 1.00 ha of forest land for non-forest purposes for social sector developmental projects executed by Government agencies. These are also covered under the Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006;

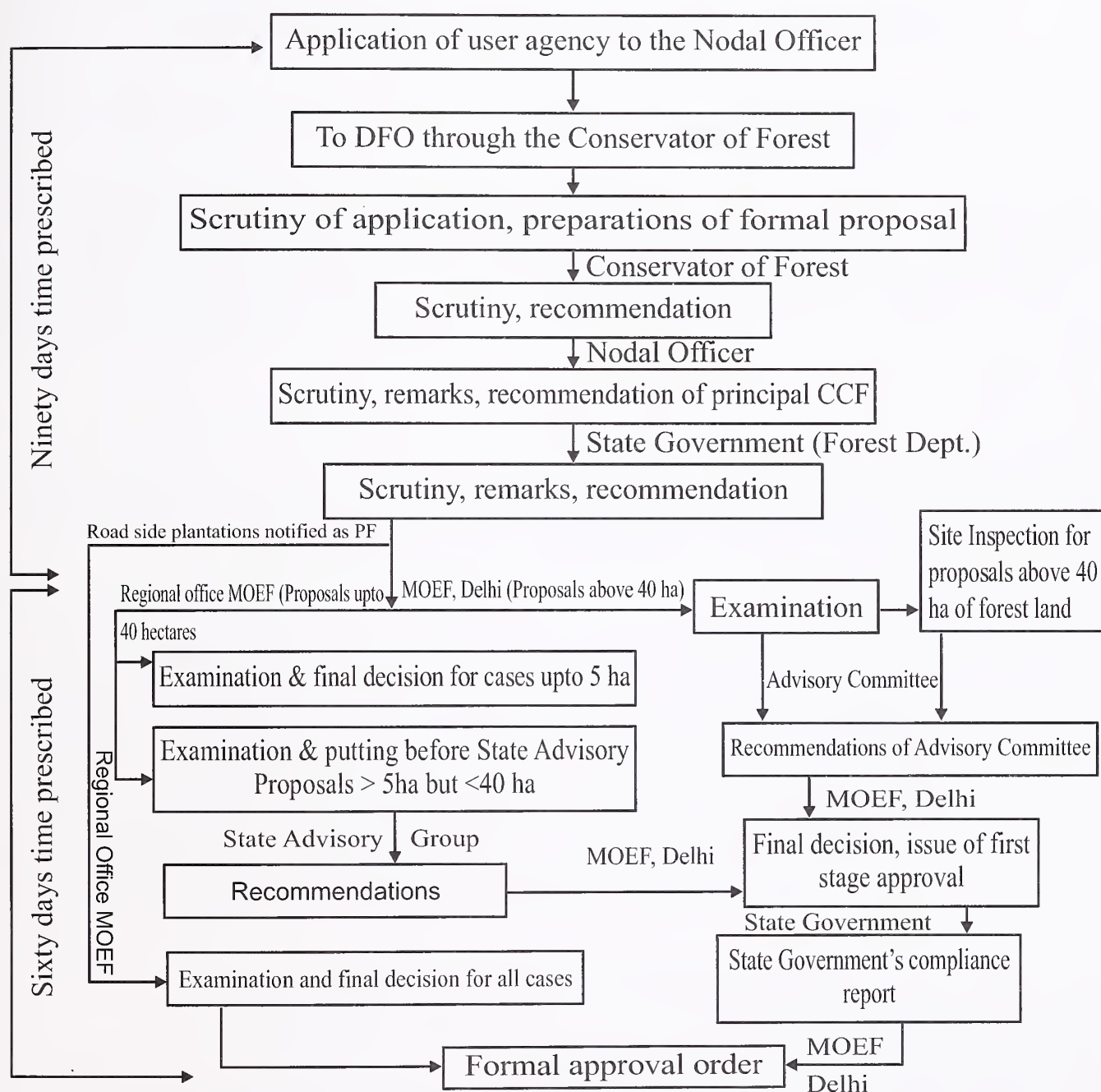
### **Measures to Reduce the Adverse Impact of the Loss of Forest Land:**

Compensatory afforestation (CA) is one of the most important conditions stipulated by the Central Government while approving proposals for de-reservation or diversion of forest land for non-forest uses to mitigate the adverse impact of the loss of forest land:

- 1) The CA shall be done over an equivalent area of non-forest land, identified contiguous to or in the proximity of the Reserved Forest or Protected Forest to enable the Forest Department to effectively manage the newly planted area.
- 2) Equivalent non-forest land identified for the purpose for CA are to be transferred to the ownership of the State Forest Department and declared as protected forests.
- 3) As a special provision for Central Government/Central Government undertaking projects, CA may be raised on degraded forest land spread over twice the forest area being diverted.



### 3.4 Flow Chart for Obtaining Forest Clearance



## CHAPTER 4

### PROCEDURE FOR OBTAINING CRZ CLEARANCE

#### 4.1 CRZ Clearance in Coastal Areas

As per Notification dated 19<sup>th</sup> February 1991 under section 3(1) and section 3(2)(v) of the Environment (Protection) Act, 1986 and Rule 5(3)(d) of the Environment (Protection) Rules, 1986 declaring coastal stretches as coastal Regulation Zone (CRZ) and regulating activities in the CRZ. If a highway project passes within 500 m from high tide line or crosses back water/creak, etc, prior CRZ clearance is required from Coastal Regulation Zone Authorities and MOEF.

Classification of Coastal Regulation Zones are as given below:

For regulating development activities, the coastal stretches within 500 meters of High Tide Line on the landward side are classified into four categories, namely:

##### 4.1.1 *Category I (CRZ-I)*

- i) Areas that are ecologically sensitive and important, such as national parks/marine parks, sanctuaries, reserve forests, wildlife habitats, mangroves, corals/coral reefs, areas close to breeding and spawning grounds of fish and other marine life, areas of outstanding natural beauty/historically/heritage areas, areas rich in genetic diversity, areas likely to be inundated due to rise in sea level consequent upon global warming and such other areas as may be declared by the Central Government or the concerned authorities at the State/Union Territory level from time to time.
- ii) Area between Low Tide Line and the high Tide Line.

##### 4.1.2 *Category-II (CRZ-II)*

The areas that have already been developed upto or close to the shoreline. For this purpose, "developed area" is referred to as that area within the municipal limits or in other legally designated urban areas which is already substantially built up and which has been provided with drainage and approach roads and other infrastructural facilities, such as water supply and sewerage mains.

##### 4.1.3 *Category-III (CRZ-III)*

Areas that are relatively undisturbed and those which do not belong to either Category-I or II. These will include coastal zone in the rural areas (developed and

undeveloped) and also areas within Municipal limits or in other legally designated urban areas which are not substantially built up.

#### **4.1.4 Category-IV (CRZ-IV)**

Coastal stretches in the Andaman & Nicobar, Lakshadweep and small islands, except those designated as CRZ-I, CRZ-II or CRZ-III.

### **4.2 Norms for Regulation of Activities**

The development or construction activities in different categories of CRZ area shall be regulated by the concerned authorities at the State/Union Territory level, in accordance with the following norms:

#### **4.2.1 CRZ-I**

No new construction shall be permitted in CRZ-I except (a) Projects relating to Department of Atomic Energy and (b) Pipelines, conveying systems including transmission lines and (c) facilities that are essential for activities permissible under CRZ-I. Between the LTL and the HTL, activities as specified under paragraph 2 (xii) of CRZ Notification, 1991 may be permitted. In addition, between LTL and HTL in areas which are not ecologically sensitive and important, the following may be permitted: (a) Exploration and extraction of Oil and Natural Gas, (b) activities as specified under proviso of sub-paragraph (ii) of paragraph 2 of CRZ Notification, 1991, and (c) Construction of dispensaries, schools, public rain shelters, community toilets, bridges, roads, jetties, water supply, drainage, sewerage which are required for traditional inhabitants of the Sunderbans Bio-sphere reserve area, West Bengal, on a case to case basis, by the West Bengal State Coastal Zone Management Authority. Road construction activity is not permitted in CRZ-1.

#### **4.2.2 CRZ-II**

Buildings shall be permitted only on the landward side of the existing road (or roads approved in the Coastal Zone Management Plan of the area) or on the landward side of existing authorised structures. Buildings permitted on the landward side of the existing and proposed roads/existing authorised structures shall be subject to the existing local Town and Country Planning Regulations including the existing norms of Floor Space Index/Floor Area Ratio:

Provided that no permission for construction of buildings shall be given on landward side of any new roads (except roads approved in the Coastal Zone Management Plan) which are constructed on the seaward side of an existing road.

Reconstruction of the authorised buildings to be permitted subject to the existing FSI/FAR norms and without change in the existing use.



The design and construction of buildings shall be consistent with the surrounding landscape and local architectural style.

#### **4.2.3 CRZ-III**

The area upto 200 meters from the High Tide Line is to be earmarked as 'No Development Zone'. No construction shall be permitted within this zone except for repairs of existing authorised structures not exceeding existing FSI, existing plinth area and existing density, and for permissible activities under the notification including facilities essential for such activities. An authority designated by the State Government/ Union Territory Administration may permit construction of facilities for water supply, drainage and sewerage for requirements of local inhabitants. However, the following uses may be permissible in this zone - agriculture, horticulture, gardens, pastures, parks, play fields, forestry and salt manufacture from sea water.

Development of vacant plots between 200 and 500 meters of High Tide Line in designated areas of CRZ-III with prior approval of Ministry of Environment and Forests (MOEF) permitted for construction of hotels/beach resorts for temporary occupation of tourists/visitors subject to the conditions as stipulated in the guidelines of Annexure-II of CRZ Notification, 1991.

Construction/reconstruction of dwelling units between 200 and 500 meters of the High Tide Line (HTL) permitted so long it is within the ambit of traditional rights and customary uses such as existing fishing villages and gaothans. Building permission for such construction/reconstruction will be subject to the conditions that the total number of dwelling units shall not be more than twice the number of existing units; total covered area on all floors shall not exceed 33 percent of the plot size; the overall height of construction shall not exceed 9 meters and construction shall not be more than 2 floors ground floor plus one floor. Construction is allowed for permissible activities under the notification including facilities essential for such activities. An authority designated by State Government/Union Territory Administration may permit construction of public rain shelters, community toilets, water supply, drainage, sewerage, roads and bridges. The said authority may also permit construction of schools and dispensaries, for local inhabitants of the area, for those panchayats the major part of which falls within CRZ if no other area is available for construction of such facilities. Reconstruction/alterations of an existing authorised building permitted subject to above condition.

#### **4.2.4 CRZ-IV**

Andaman & Nicobar Islands:

- No new construction of buildings shall be permitted within 200 meters of the HTL;
- The buildings between 200 and 500 meters from the High Tide Line shall not have more than 2 floors (ground floor and first floor), the total covered area on



all floors shall not be more than 50 percent of the plot size and the total height of construction shall not exceed 9 meters;

- The design and construction of buildings shall be consistent with the surrounding landscape and local architectural style.
- Corals from the beaches and coastal waters shall not be used for construction and other purposes.
- sand may be used from the beaches and coastal waters, only for construction purpose upto the 30<sup>th</sup> day of September, 2002 and thereafter it shall not be used for construction and other purposes.
- Dredging and underwater blasting in and around coral formations shall not be permitted; and
- However, in some of the islands, coastal stretches may also be classified into categories CRZ-I or II or III with the prior approval of Ministry of Environment and Forests and in such designated stretches, the appropriate regulations given for respective Categories shall apply.

Application form for obtaining CRZ clearance (**Annex VI**) shall be submitted to Coastal Zone Management Authority of State Govt.

The CRZ status map is to be prepared from the recognized Institute/Coastal Zone Management Authority like CESS.

#### **4.2.5** *Flow Chart for Obtaining CRZ Clearance*



## CHAPTER 5

### PROCEDURE FOR WILDLIFE CLEARANCE

#### 5.1 Wildlife Clearance from Supreme Court in Notified Wildlife Areas

When a road project passes through a protected area (PA), like a National Park, Wildlife Sanctuary or biosphere reserve, prior clearance is necessary from National Board of Wildlife and then from Honorable Supreme Court. Wildlife clearance is a prerequisite for forest clearance for diversion of forest land located in protected area. It is important to mention that even surveys and geotechnical studies in Protected Areas (PA) require prior clearance from the National Board of Wildlife. The form for wildlife clearance consists 5 parts (**Annex V**).

#### 5.2 Data to be Supplied by Project Proponent

##### Maps:

- 1) Relevant survey of India ( SOI) (scale 1:50000) sheets showing the boundary of the PA (Core + Buffer)
- 2) Exact location on above of :
  - a) area proposed for diversion/denotification
  - b) larger area of proposed project
- 3) Demarcation on above map of total impact area of project
- 4) Relevant SOI sheets of scale 1:50,000 showing contiguous areas - to identify relevant wildlife use areas and corridors to adjacent project Area PAs
- 5) Forest Survey of India (FSI) Map of vegetation for above areas
- 6) Demarcation on the map of atleast 3 best alternatives to proposal that do not impact on any PA

##### Information:

- 1) The project report to be attached
- 2) Abstract of trees to be felled after joint inspection.
- 3) Undertaking to bear the cost of CA, NPV, Mitigative measure for wildlife etc.
- 4) Certificate for non-availability of any other alternatives.
- 5) Bar Chart for construction schedule.
- 6) Project Location details and cost benefit analysis of project

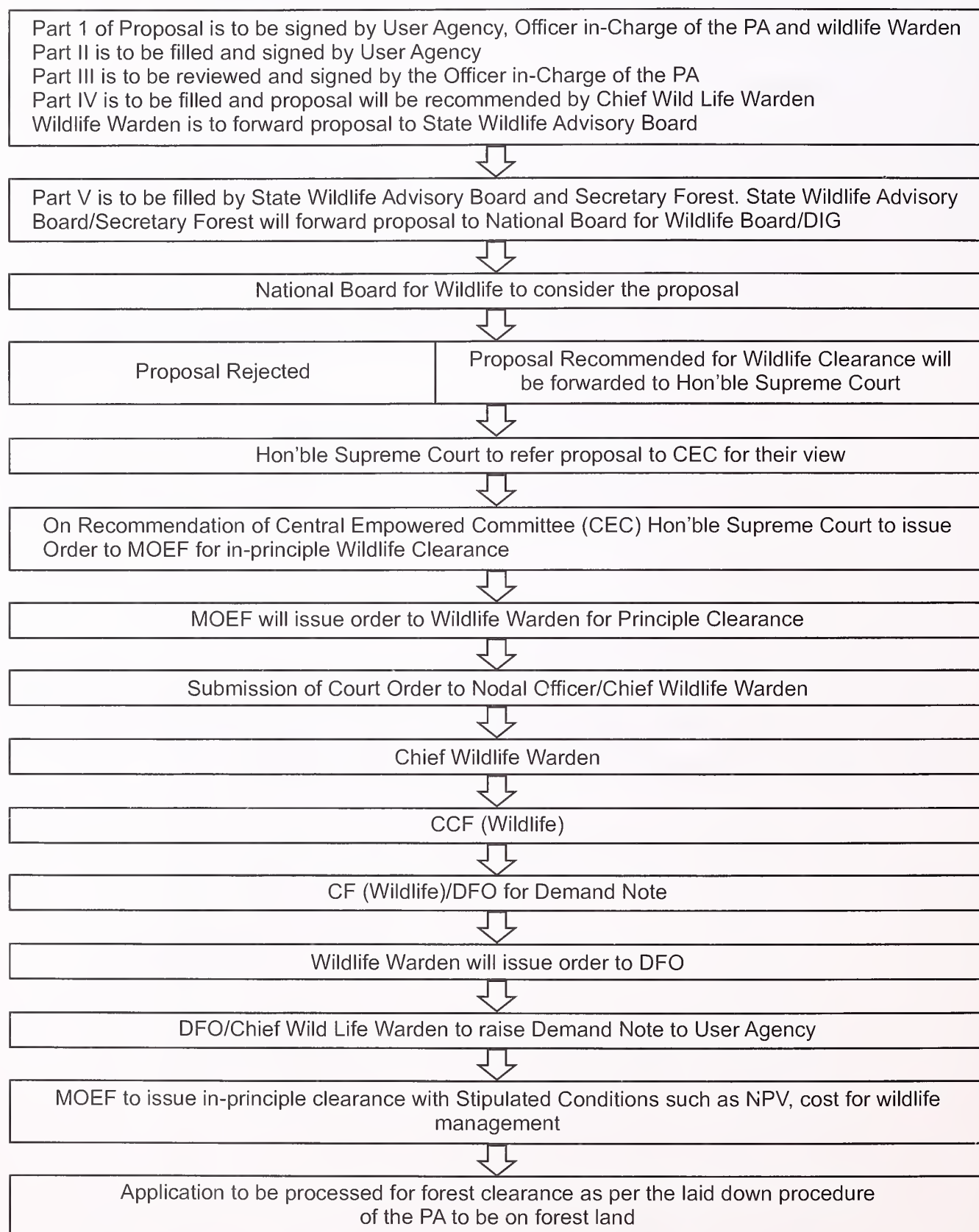
- 7) Project Location details and cost benefit analysis of 3 best alternatives to proposed project
- 8) EIA Report, EMP, if any already done

**Report of Chief Wildlife Warden:**

- 1) History and present Legal status of PA
- 2) Relevant biological data of area
- 3) List of relevant research work undertaken at any time in the PA (title, researcher, year)
- 4) Site inspection report of forest division
- 5) Wildlife movement patterns and corridors
- 6) Impact area and nature of impact of project including both direct and indirect impact of wildlife on its habitat;
  - a) During the project
  - b) Anticipated subsequent to project completion
- 7) List of any areas identified in the past or now identified in the State as suitable Wildlife Habitats and corridors
- 8) Settlement Report
- 9) NOC
- 10) Recommendations with reasons

In case the highway alignment passes through identified migratory corridor of wildlife, eco-sensitive zone etc., comments of Chief Wildlife Warden of the state are essential, even if no clearance is actually involved for the highway alignment.

**5.3 Flow Chart for Wildlife Clearance (Almost same procedure to be followed for seeking survey and investigation in the PA, except that the permission is granted by the National Board of Wildlife in normal cases)**





## CHAPTER 6

### OTHER RELEVANT CLEARANCES

#### **6.1 Permission from State/Central Ground Water Authority**

For the construction of highway, if water requirements are met through ground water, prior permission is required to obtain from State/Central Ground Water Board.

#### **6.2 Permission of Irrigation Department/Water Resource Department**

For the construction of highway, if water requirements are met through River/Canal, prior permission is required to obtain from Irrigation Department//Water Resource Department.

#### **6.3 NOC from Archaeological Department**

When Highways passes within the 300 m from Historical or Archaeological Monument, NOC is required from Archeological Department under Ancient Monuments and Archaeological Site and Remains Acts 1958 which is key legislation for preservation of culture and historical remains.

#### **6.4 Permission for Quarrying and Borrowing Operations**

At the time of construction of highway, permission of Department of Geology and Mines, State Government is required to obtain for new quarry and borrowing operations.

#### **6.5 Permission from Dahanu Taluka Environment Protection Authority**

If the highway passes through the Dhanu Taluka Eco-Sensitive Zone in the State of Maharashtra, permission from Dhanu Taluka Environment Protection Authority is required under sub-section (3) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986).

#### **6.6 Permission from Taj Trapezium Zone Pollution (Prevention and Control) Authority**

If the highway passes through Taj Trapezium Zone in the State of Uttar Pradesh, permission is required from Taj Trapezium Zone Pollution (Prevention and Control) Authority under sub-sections (1) and (3) of section 3 of the Environment (Protection) Act, 1986(29 of 1986).

## CHAPTER 7

### APPLICABLE STANDARDS

The MOEF has the overall responsibility to set policy and standards for the protection of environment along with Central Pollution Control Board (CPCB). The relevant standards as notified vide notification dated GSR 176 (E) April 1996 and described in CPCB document: Standards For Liquid Effluents, Gaseous Emissions, Automobile Exhaust, Noise and Ambient Air Quality - Pollution Control Law Series: PCL/4/1995-96, June 1997. The standards are categorized as follows:

- Standards for Liquid Effluent
- Guidelines for disposal of solid waste
- Guidelines for discharge of gaseous emissions
- Standards for noise limits for diesel generator sets
- Standards for ambient noise levels
- Standards for occupational exposure

#### 7.1 Standards for Liquid Effluents

The water quality standard are given in **Table 7.1(a) and 7.1(b)**:

**Table 7.1(a) Tolerance Limits for Inland Surface Waters Subject To Pollution  
(IS: 2296-1982)  
Tolerance Limits for Inland Surface Waters, Class C (Clause 3.3)**

Sl.No.	Characteristic	Tolerance Limit	Method Of Test	
			Ref To Cline In IS:3025-1964 #	Other Method Of Test
i)	pH value	6.5-8.5	8	--
ii)	Dissolved Oxygen, mg/l,	4	50	--
iii)	Biochemical oxygen demand (5 days at 20° C), mg/l, Max	3	53	--
iv)	Total Coli form Organisms, MPN/100 ml, Max	5000*	--	3.3 of IS:1622-1981**
v)	Color, Hazen units, Max	300	5	--
vi)	Fluorides (as F), mg/l, Max	1.5	23	--

Sl.No.	Characteristic	Tolerance Limit	Method Of Test	
			Ref To Cline In IS:3025-1964 #	Other Method Of Test
vii)	Cadmium (as Cd), mg/l, Max	0.01	--	9 of IS:2488 (Part II)-1968##
viii)	Chlorides (as Cl), mg/l, Max	600	24	--
ix)	Chromium (as Cr <sup>6+</sup> ), mg/l, Max	0.05	38	--
x)	Cyanides (as CN), mg/l, Max	0.05	27	--
xi)	Total dissolved solids, mg/l, Max	1500	12	--
xii)	Selenium (as Se), mg/l, Max	0.05	28	--
xiii)	Sulphates (as SO <sub>4</sub> ), mg/l, Max	400	20	--
xiv)	Lead (as Pb), mg/l, Max	0.1	37	--
xv)	Copper (as Cu), mg/l, Max	1.5	36	--
xvi)	Arsenic (as As), mg/l, Max	0.2	40	--
xvii)	Iron (as Fe), mg/l, Max	50	32	--
xviii)	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max	0.005	54	--
xix)	Zinc (as Zn), mg/l, Max	15	39	--
xx)	Insecticides, mg/l, Max	Absent	--	8 of IS:2488 (Part III)-1968* @
xxi)	Anionic detergents (as MBAS) mg/l, Max	1	--	Methylene blue-extraction method
xxii)	Oils and grease, mg/l, Max	0.1	--	13 of IS:2488 (Part I)-1966\$
xxiii)	Nitrates (a NO <sub>3</sub> ), mg/l, Max	50	48	--
xxiv)	Alpha emitters, µc/ml, Max	10 <sup>-9</sup>	58	--
xxv)	Beta emitters, µc/ml, Max	10 <sup>-8</sup>	58	--

# Methods of sampling and test (physical and chemical) for water used in industry.

\* If MPN count is noticed to be more than 5000 MPN then regular tests shall be carried out. The criteria shall be satisfied if during a period of time not more than 5 percent of the samples show more than 20000 MPN and not more than 20 percent of the samples show more than 5000 MPN. Further the faecal coliforms should not be more than 40 percent of the total coliforms.

\*\* Methods of sampling and microbiological examination of water (first revision)

\$ Methods of sampling and test for industrial effluents, Part I

## Methods of sampling and test for industrial effluents, Part II

@ Methods of sampling and test for industrial effluents, Part III

Table 7.1(b) Indian Standards for Drinking Water (IS 10500 : 1991)

Sl.No.	Substance or Characteristic	Requirement (Desirable Limit)	Permissible Limit in the absence of Alternate source
<b>Essential Characteristics</b>			
1)	Colour, (Hazen units, Max)	5	25
2)	Odour	Unobjectionable	Unobjectionable
3)	Taste	Agreeable	Agreeable
4)	Turbidity (NTU, Max)	5	10
5)	pH Value	6.5 to 8.5	No Relaxation
6)	Total Hardness (as CaCO <sub>3</sub> ) mg/lit., Max	300	600
7)	Iron (as Fe) mg/lit, Max	0.3	1.0
8)	Chlorides (as Cl) mg/lit, Max.	250	1000
9)	Residual free chlorine, mg/lit, Min	0.2	--
<b>Desirable Characteristics</b>			
10)	Dissolved solids mg/lit, Max	500	2000
11)	Calcium (as Ca) mg/lit, Max	75	200
12)	Copper (as Cu) mg/lit, Max	0.05	1.5
13)	Manganese (as Mn) mg/lit, Max	0.10	0.3
14)	Sulfate (as SO <sub>4</sub> ) mg/lit, Max	200	400
15)	Nitrate (as NO <sub>3</sub> ) mg/lit, Max	45	100
16)	Fluoride (as F) mg/lit, Max	1.9	1.5
17)	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH) mg/lit, Max.	0.001	0.002
18)	Mercury (as Hg) mg/lit, Max	0.001	No relaxation
19)	Cadmium (as Cd) mg/lit, Max	0.01	No relaxation
20)	Selenium (as Se) mg/lit, Max	0.01	No relaxation
21)	Arsenic (as As) mg/lit, Max	0.05	No relaxation



Sl.No.	Substance or Characteristic	Requirement (Desirable Limit)	Permissible Limit in the absence of Alternate source
22)	Cyanide (as CN) mg/lit, Max	0.05	No relaxation
23)	Lead (as Pb) mg/lit, Max	0.05	No relaxation
24)	Zinc (as Zn) mg/lit, Max	5	15
25)	Anionic detergents (as MBAS) mg/lit, Max	0.2	1.0
26)	Chromium (as Cr <sup>6+</sup> ) mg/lit, Max	0.05	No relaxation
27)	Polynuclear aromatic hydrocarbons (as PAH) g/lit, Max	--	--
28)	Mineral Oil mg/lit, Max	0.01	0.03
29)	Pesticides mg/l, Max	Absent	0.001
30)	Radioactive Materials		
	i) Alpha emitters Bq/l, Max	--	0.1
	ii) Beta emitters pci/l, Max	--	1.0
31)	Alkalinity mg/lit, Max	200	600
32)	Aluminium (as Al) mg/l, Max	0.03	0.2
33)	Boron mg/lit, Max	1	5

## 7.2 Ambient Air Quality Standards

The standards for National Ambient Air Quality (NAAQ) have been prescribed by MOEF vide GSR 826 (E) dated 18 November 2009 as given in **Table 7.2**.

**Table 7.2 National Ambient Air Quality Standards**

S.No.	Pollutants	Time Weighted Average	Concentration in Ambient Air		Methods of Measurements
			Industrial Residential, Rural & Other Areas	Ecologically Areas Sensitive Area (Notified by Central Government)	
1)	Sulphur dioxide (SO <sub>2</sub> ) (µg/m <sup>3</sup> )	Annual Average* 24 Hours**	50 80	20 80	- Improved West and Geak - Ultraviolet Fluorescence
2)	Oxides of Nitrogen (NO <sub>x</sub> ) (µg/m <sup>3</sup> )	Annual Average* 24 Hours**	40 80	30 80	- Modified Jacob & Hochheiser (Na - Arsenite) - Chemiluminescence
3)	Particulate Matter (Size Less than 10 µm) or PM <sub>10</sub> (µg/m <sup>3</sup> )	Annual Average* 24 Hours**	60 100	60 100	- Gravimetric - TOEM - Beta Attenuation
4)	Particulate Matter (Size Less than 2.5µm) or PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Annual Average* 24 Hours**	40 60	40 60	- Gravimetric - TOEM - Beta Attenuation
5)	Ozone O <sub>3</sub> (µg/m <sup>3</sup> )	8 Hours* 1 Hours**	100 80	100 80	- UV Photometric - Chemiluminescenc - Chemical Methods
6)	Lead (Pb) (µg/m <sup>3</sup> )	Annual Average* 24 Hours**	0.5 1.0	0.5 1.0	- AAS/ICP Methods after sampling on EPM Method 2000 or equivalent filter paper - ED-XRF using Teflon Filter Paper
7)	Carbon monoxide (CO) (mg/m <sup>3</sup> )	Annual Average* 24 Hours**	2 4	2 4	- Non Dispersive Infra Red (NDIR) - Spectroscopy
8)	Ammonia (NH <sub>3</sub> ) (µg/m <sup>3</sup> )	Annual Average* 24 Hours**	100 400	100 400	- Chemiluminescenc - Indophenol Blue Method

S.No.	Pollutants	Time Weighted Average	Concentration in Ambient Air		Methods of Measurements
			Industrial Residential, Rural & Other Areas	Ecologically Sensitive Area (Notified by Central Government)	
9)	Benzene (C <sub>6</sub> H <sub>6</sub> ) (µg/m <sup>3</sup> )	Annual*	5	5	- Gas Chromatography based continuous Analyzer - Adsorption and Desorption followed GC Analysis
10)	Benzo (a) Pyrene (BaP) particulate phase only (µg/m <sup>3</sup> )	Annual*	1	1	Solvent Extraction followed by HPLC/GC Analysis
11)	Arsenic (As) (µg/m <sup>3</sup> )	Annual*	6	6	- AAS/ICP Methods after sampling on EPM Method 2000 or equivalent filter paper.
12)	Nickel (Ni) (µg/m <sup>3</sup> )	Annual*	20	20	- AAS/ICP Methods after sampling on EPM Method 2000 or equivalent filter paper.

**Note:**

- \* Annual arithmetic mean of minimum 104 measurements in a year taken twice a week 24 hourly at uniform intervals.
- \*\* 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98 percent of the time in a year. 2 percent of the time, they may exceed the limits but not on two consecutive days of monitoring.

**Note:** Whenever and wherever monitoring results on two consecutive days of monitoring exceeds the limit specified above for respective category, it shall be considered reason to institute regular and continuous monitoring and further investigation (Source: National Ambient Air Quality Standard, CPCB).

### 7.3 Noise Limits and Guidelines for Diesel Generators

Noise from DG set shall be controlled by providing an acoustic enclosure or by treating the room acoustically, at the user end.

The acoustic enclosure or acoustic treatment of the room shall be designed for minimum 25 dB(A) insertion loss or for meeting the ambient noise standards, whichever is on the higher side (if the actual ambient noise is on the higher side, it may not be possible to check the performance of the acoustic enclosure/acoustic treatment). Under such

circumstances the performance may be checked for noise reduction upto actual ambient noise level, preferably, in the night time. The measurement for insertion loss may be done at different points at 0.5 m from the acoustic enclosure/room, and then averaged;

These limits shall be regulated by the state pollution control boards:

- The manufacturer shall offer to the user a standard acoustic enclosure of 25 dB(A) insertion loss and also a suitable exhaust muffler with insertion loss of 25 dB(A).
- The user shall make efforts to bring down the noise level due to the DG set, outside his premises, within the ambient noise requirements by proper siting and control measures

Installation of a DG set must be strictly in compliance with the recommendations of the DG set manufacturer and a proper routine and preventive maintenance procedure for the DG set should be set and followed in consultation with the DG set manufacturer.

### Emissions from DG Sets

As per the CPCP standards, emissions are governed by providing stack height. The minimum stack height for DG set is worked out using the formula :  $H = h + 0.2\sqrt{KVA}$ , where H is the height of the stack in meters, h is the height in metres, of the building where DG set is installed and KVA is the generation capacity of DG set.

## 7.4 Ambient Noise Standards

Noise standards notified by the MOEF vide gazette notification dated 14<sup>th</sup> February, 2000 are based on the A weighted equivalent noise level ( $L_{eq}$ ) are as presented in **Table 7.3**.

**Table 7.3 Ambient Noise Standards**

Area Code	Category of Area	Limits in dB(A) $L_{eq}$	
		Day time*	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone**	50	40

\* Day time is from 6 am to 10 pm, Night time is 10 pm to 6 am

\*\* Silence zone is defined as area upto 100 meters around premises of hospitals, educational institutions and courts. Use of vehicle horns, loud speakers and bursting of crackers are banned in these zones.



## 7.5 Noise Standards for Occupational Exposure

Noise standards in the work environment are specified by Occupational Safety and Health Administration (OSHA-USA), which in turn are being enforced by Government of India through model rules framed under the Factories Act. These are presented in **Table 7.4**.

**Table 7.4 Standards for Occupational Noise Exposure**

<b>Total Time of Exposure per Day in Hours (Continuous or Short Term Exposure)</b>	<b>Sound Pressure Level in dB(A)</b>
8	90
6	92
4	95
3	97
2	100
3/2	102
1	105
3/4	107
1/2	110
1/4	115
Never	>115

**Note:** No exposure in excess of 115 dB(A) is to be permitted.

For any period of exposure falling in between any figure and the next higher or lower figure as indicated in column (1), the permissible level is to be determined by extrapolation on a proportionate scale.

## ANNEX-I

## Various Acts, Rules, Notifications, Laws and Regulations etc. for Road Projects

SN.	Clearances/Permissions	Act	Rule/Notification	Section	Category	Jurisdiction
1)	Environmental Clearance	Environment (Protection) Act 1986	Environmental (Protection) Rule 1986, EIA Notification 2009 dated 1 December 2009	S.O. 3067	A & B (refer section 2.1)	MOEF/SEIAA*
2)	Forest Clearance (diversion of forest land)	Forest Conservation Act, 1980	Forest Conservation Rule 2003	G.S.R. 107 (E)	Up to 40 ha Above 40 ha	Forest Department/ RMOEF Forest Department/ Central MOEF
3)	Tree Cutting on Forest Land	Forest Conservation Act, 1980	Forest Conservation Rule, 2003/ any other local law	No. G.S.R. 94(E) dated 3.2.2004	Trees on Forest Land	Forest Department & Collector
4)	Tree Cutting on Private Land	State Govt. and Local Laws	State Govt. and Local Laws	-	Trees on Private Land	District Collector/ Tehsildar
5)	Shifting of Forest Property	Forest Conservation Act, 1980 and Local Laws	Forest Conservation Rule, 2003	-	-	Forest Department
6)	Wildlife Clearance	Wildlife Protection Act, 1972 Orders of Hon'ble Supreme Court	Wildlife Protection Rule, 1995	G.S.R. 348(E)-dated 18.4.1995	-	Honorable Supreme Court, NBWL, MOEF & SBWL
7)	Permission to cross a wildlife corridor	Wildlife Protection Act, 1972 Orders of Hon'ble Supreme Court, MOEF guidelines	-	-	-	Chief Wildlife Warden of the State
8)	CRZ Clearance	Environmental (Protection) Act 1986	Coastal Regulation Zone Notification 1991	S.O.1243 (E),	CRZ I, II, III, IV & IV	State CRZ Authority & MOEF

SN.	Clearances/Permissions	Act	Rule/Notification	Section	Category	Jurisdiction
9)	Withdrawal of Ground Water	Environmental (Protection) Act 1986	MOEF Notification S.O. 1024 (E) dated 6 Nov. 2000	Sub-Section (3) of Section 3	–	Central Ground Water Board Authority
10)	Use of Surface Water	State Govt. and Local Laws	State Govt. and Local Laws	–	–	Irrigation Departments of State Govt.
11)	Archaeology Clearance	The Ancient Monuments and Archaeological Sites and Remains Act, 1958	The Ancient Monuments and Archaeological Sites and Remains Act, 1958	Rule 34	Inter-National or National	Archeological Department
12)	Consent to Establish a project/plant and machinery	<ul style="list-style-type: none"> <li>• The Air (Prevention and Control of Pollution) Act, 1981 and Rules 1981 and its amendment, 1982, 1983, 1987;</li> <li>• The Water (Prevention and Control of Pollution) Act, 1974 and Rules 1975;</li> </ul>	<ul style="list-style-type: none"> <li>• The Air (Prevention and Control of Pollution) Act, 1981 and Rules</li> <li>• The Water (Prevention and Control of Pollution) Act, 1974 and Rules 1975;</li> </ul>	–	Red	State Pollution Control Board
13)	Consent to Operate	<ul style="list-style-type: none"> <li>• The Air (Prevention and Control of Pollution) Act, 1981 and Rules 1981 and its amendment, 1982, 1983, 1987;</li> <li>• The Water (Prevention and Control of Pollution) Act, 1974 and Rules 1975;</li> </ul>	<ul style="list-style-type: none"> <li>• The Air (Prevention and Control of Pollution) Act, 1981 and Rules</li> <li>• The Water (Prevention and Control of Pollution) Act, 1974 and Rules 1975;</li> </ul>	–	Red	State Pollution Control Boards

SN.	Clearances/Permissions	Act	Rule/Notification	Section	Category	Jurisdiction
14)	Hazardous Waste Authorization	Environmental (Protection) Act 1986	Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2009	S.O.2447 (E)	Hazardous	State Pollution Control Board
15)	Ambient Noise Level	Environmental (Protection) Act, 1986	Ambient Noise Rule 2000	S.O.123 (E)		State Pollution Control Board

■ **SEIAA- State Environmental Impact Assessment Authority**



## ANNEX-II

### Checklists for Applicable Acts, Rules, Notifications, Laws and Regulations etc. for Road Projects:

Sl.No.	Clearances/Permissions	Conditions for Clearance/permission	Status of Clearance
1)	Environmental Clearance	<p>More than 30 km length and more than 20 m wide land acquisition all along for new Highway and up-gradation of existing Highway (Category A).</p> <p>All state highway project and State highway expansion project in hilly terrain (Above 1,000 m AMSL) and or ecologically sensitive area will require prior Environmental Clearance from MOEF (Category B).</p> <p>A Category B project falling within 10 km of interstate boundary, or from an eco-sensitive area also to be treated as category A.</p>	
2)	Forest Clearance	<p>Forest Clearance from Regional MOEF office if diversion of land is less than or equal to 50 ha.</p> <p>Forest clearance from MOEF office on the recommendation of regional MOEF office if diversion of land is more than 5 ha and less than 40 ha.</p> <p>Forest Clearance from MOEF office if diversion of land is more than 40 ha.</p>	
3)	Trees Cutting	Permission is required if cutting of tree on non forest land.	
4)	Shifting of Forest Property	Permission is required from forest Department if shifting of Forest Property.	
5)	Wildlife Clearance	Road is passing through Wildlife Sanctuary/National Parks, or other protected area	
6)	Permission to cross a wildlife corridor	Comments of Chief Wildlife Warden and his recommendation required, if an alignment falls on a migratory corridor of wildlife	
7)	CRZ Clearance	If road is passing through high tide and low tide zone of sea.	

Sl.No.	Clearances/Permissions	Conditions for Clearance/permission	Status of Clearance
8)	Ground Water withdrawal	For withdrawal of ground water for construction and operation of Road project.	
9)	Use of Surface Water	For use of surface water for construction and operation of Road project.	
10)	Archaeological Clearance	No construction activity is allowed within 100 m distance from Archaeological monument. Clearance required if Archaeological monument is located within 100 m to 300 m distance from the road	
11)	Consent to Establish	Consent to Establish is required from SPCB for disposal of emissions and effluents from construction of operation of road project.	
12)	Consent to Operate	Consent to Operate is required from SPCB for disposal of emissions and effluents from construction and operation of road project.	
13)	Hazardous Waste Authorization	Hazardous Waste Authorization is required from SPCB for disposal of hazardous wastes generated from construction and operation of road projects.	

**Annex-III**  
(Clause 2.2)  
Application For Environmental Clearance  
FORM I

**I) Basic Information**

1)	Name of the Project/s	
2)	S No. in the Schedule	
3)	Proposed Capacity/Area/Length/Tonnage/ to be handled/Command Area/Lease Area/Number of Wells to be Drilled.	
4)	New/Expansion/Modification	
5)	Existing Capacity/Area, etc.	
6)	Category of Project i.e. 'A' or 'B'	
7)	Does it attract the General Condition? If yes please specify	
8)	Does it attract the Specific Condition ? If yes please specify	
9)	Location	
	Plot/Survey/Khasra No	
	Village	
	Tehsil	
	District	
	State	
10)	Nearest Railway Station/Airport alongwith distance in Kms	
11)	Nearest Town, City, District Headquarters along with Distance in Kms	
12)	Village Panchayats, Zilla Parisad, Municipal Corporation. Local Bodies (Complete Address with phone Numbers to be given)	
13)	Name of the Applicant	
14)	Registered Address	

15)	Address of Correspondence		
	Name		
	Designation (Owner/Partner/CEO)		
	Address		
	Pin Code		
	Email		
	Telephone No.		
	Fax No.		
16)	Details of Alternative Site Examined. If any Location of these sites should be shown on a toposheet		
17)	Interlinked Projects		
18)	Whether Separate Application of interlinked project has been submitted ?		
19)	If yes, date of submission		
20)	If no, reason		
21)	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given.		
	a)	The Forest (Conservation) Act 1980?	
	b)	Wildlife (Protection) Act 1972?	
	c)	The CRZ Notification, 1991?	
22)	Whether there is any Government Order/Policy relevant/relating to site?		
23)	Forest Land Involved (Hectare)		
24)	Whether there is any litigation pending against the project and /or land which the project is proposed to be set up		
	a)	Name of the Court?	
	b)	Case No.	
	c)	Order/directions of the Courts, if any and its relevance with the proposed project	



I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost.

Date :

Place :

Signature of Applicant

Name and Full Address  
(Project Proponent/Authorized Signatory)

## II) Activity

- 1) Construction, operation or decommissioning of the project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)		
1.2	Clearance of existing land, vegetation and buildings?		
1.3	Creation of new land uses?		
1.4	Pre-construction investigations e.g. bore house, soil testing?		
1.5	Construction works?		
1.6	Demolition Works?		
1.7	Temporary sites used for construction works or Housing of Construction workers?		

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations		
1.9	Under ground works including mining or tunneling		
1.10	Reclamation Works?		
1.11	Dredging?		
1.12	Offshore structures?		
1.13	Production and manufacturing processes?		
1.14	Facilities for Storages of goods or materials?		
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?		
1.16	Facilities for long term housing of operational workers?		
1.17	New road, rail or sea traffic during construction or operation?		
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.?		
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?		
1.20	New or diverted transmission lines or pipelines?		
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.22	Stream crossings?		

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information
1.23	Abstraction or transfer of water from ground or surface waters?		
1.24	Changes in water bodies or the land surface affecting drainage or run-off?		
1.25	Transport of personnel or materials for construction, operation or decommissioning?		
1.26	Long-Term dismantling or decommissioning or restoration works?		
1.27	Ongoing activity during decommissioning which could have an impact on the environment?		
1.28	Influx of people to an area in either temporarily or permanently?		
1.29	Introduction of alien species?		
1.30	Loss of native species or genetic diversity?		
1.31	Any other actions?		

- 2) Use of Natural resources for Construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply) :

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)		
2.2	Water (expected source & competing users) unit : KLD		
2.3	Minerals (MT)		

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
2.4	Construction material-stone, aggregates, and/soil (expected source- MT)		
2.5	Forests and Timber (source-MT)		
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)		
2.7	Any other natural resources (Use appropriate standard units)		

- 3) Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)		
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)		
3.3	Affect the welfare of people e.g. by changing living conditions?		
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.		
3.5	Any other cause		



4) Production of solid wastes during construction or operation or decommissioning (MT/month)

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes		
4.2	Municipal waste (domestic and or commercial wastes)		
4.3	Hazardous waste (as per Hazardous Waste Management Rules)		
4.4	Other industrial process wastes		
4.5	Surplus product		
4.6	Sewage sludge or other sludge from effluent treatment		
4.7	Construction or demolition wastes		
4.8	Redundant machinery or equipment		
4.9	Contaminated soils or other materials		
4.10	Agricultural wastes		
4.11	Other solid wastes		

5) Release of pollutants or any hazardous, toxic or noxious substances to air (kg/h)

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationery or mobile sources		
5.2	Emissions from production processes		

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
5.3	Emissions from materials handling including storage or transport		
5.4	Emissions from construction activities including plant and equipment		
5.5	Dust or odours from handling or materials including construction materials, sewage and waste		
5.6	Emissions form incineration of waste		
5.7	Emission from burning of waste in open air (e.g. slash materials, construction debris)		
5.8	Emissions from any other sources		

## 6) Generation of Noise and Vibration, and Emissions of Light and Heat :

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushes		
6.2	From industrial or similar processes		
6.3	From construction or demolition		
6.4	From blasting or piling		
6.5	From construction or operational traffic		
6.6	From lighting or cooling systems		
6.7	From any other sources		

- 7) Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, ground water, coastal waters or the sea:

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials.		
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)		
7.3	By deposition of pollutants emitted to air into the land or into water		
7.4	From any other sources		
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?		

- 8) Risk of accidents during construction or operation of the Project, which could affect human health or the environment:

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc. from storage, handling, use or production of hazardous substances.		
8.2	From any other causes ?		
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquake, landslides, cloudburst etc.)?		

- 9) Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

Sl.No.	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
9.1	Lead to development of supporting, utilities, ancillary development or development stimulated by the project, which could have impact on the environment e.g.		
	• Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)		
	• Housing development		
	• Extractive industries		
	• Supply industries		
	• Other		
9.2	Lead to after use of the site, which could have an impact on the environment.		
9.3	Set a precedent for later developments.		
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects.		

### III) Environmental Sensitivity

Sl.No.	Areas confirmation	Name/ Identity	Aerial distance (within 15 km) proposed project location boundary
1)	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value		



Sl.No.	Areas confirmation	Name/ Identity	Aerial distance (within 15 km) proposed project location boundary
2)	Areas which are important or sensitive for ecological reasons- Wetlands, watercourse or other water bodies, coastal zone, biosphere, mountains, forests		
3)	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration		
4)	Inland, coastal, marine or underground waters		
5)	State, National boundaries		
6)	Routes or facilities used by the public for access to recreation or other tourist, pilgrim area		
7)	Defense Installations		
8)	Densely populated or built-up area		
9)	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)		
10)	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)		
11)	Areas already subjected to pollution or environmental damage (those where existing legal environmental standards are exceeded)		
12)	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquake, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)		

#### IV) Proposed Terms of Reference for EIA studies

**Annex–IV**

(Clause 3.1)

Application for Forest Clearance

**Form for Seeking Prior Approval Under Section 2 of the proposals by the State Government and Other Authorities****Part I**

(to be filled up by user agency)

1)	Project Details:	
	i) Short narrative of the proposal and project/ scheme for which the forestland is required.	
	ii) Map showing the required forestland, boundary of adjoining forest on a 1:50,00 scale map.	
	iii) Cost of the project.	
	iv) Justification for locating the project in forest area.	
	v) Cost benefit analysis (to be enclosed).	
	vi) Employment likely to be generated.	
2)	Purpose-wise break-up of the total land acquired for implementation of the project.	
3)	Details of displacement of people due to the project if any.	
	i) Number of families.	
	ii) Number of Scheduled Castes/Scheduled Tribe families.	
	iii) Rehabilitation Plan (to be enclosed).	
4)	Whether clearance under Environment (Protection) act, 1986 required (yes/No).	
5)	Undertaking to bear the cost of raising and maintenance of compensatory aforestation and/or penal compensatory aforestation as well as cost for protection and regeneration of safety zone, etc. as per the scheme prepared by the state Government (undertaking to be enclosed).	
6)	Details of Certificates/Documents enclosed as required under the instructions	

Date:

Place:

State Serial No. of Proposal -----

(to be filled up by the Nodal Officer with due date or receipt)

**Part II**

(To be filled by the concerned Deputy Conservator of Forest).

State Serial No. of proposal -----

7)	Location of the project/scheme	
	i) State/union Territory	
	ii) District	
	iii) Forest Divisions	
	iv) Area of forestland proposed for diversion (in ha.)	
	v) Legal status of Forest	
	vi) Density of vegetation.	
	vii) Species-wise (Scientific names) and diameter class-wise enumeration of trees (to be enclosed). In case of irrigation/ hydel projects enumeration at FRI.FRI-2 meter & FRI-4 meter also to be enclosed).	
	viii) Brief note on vulnerability of the forest area to erosion.	
	ix) Approximate distance of proposed site for diversion from boundary of forest.	
	x) Whether forms part of National part wildlife sanctuary, biosphere reserve, tiger reserve, elephant corridor, etc. (If so details of the area and comments of the Chief Wildlife Warden to be annexed)	
	xi) Whether any rare/endangered/unique species of flora and fauna found in the area if so, details thereof.	
	xii) Whether any protected archaeological/heritage site/ defence establishment or any other important monument is located in the area. If so, the details thereof with NOC from competent authority, if required.	
8)	Whether the requirement of forestland as proposed by the user agency in col.2 of part-I is unavoidable and barest minimum for the project. If no recommended area item-wise with details of alternative examined.	
9)	Whether any work in violation of the Act has been carried out (Yes/No). If Yes details of the same including period of work done, action taken on erring officials. Where work in violation is still in progress.	

10	i)	Details of non-forest area/degraded forest area identification for compensatory afforestation, its distance from adjoining forest, number of patches, size of each patch.	
	ii)	Map showing non-forest/degraded forest area identified for compensatory afforestation and adjoining forest boundaries.	
	iii)	Detailed compensatory afforestation scheme including species to be planted, implementing agency, time schedule, cost structure, etc.	
	iv)	Total financial outlay for compensatory afforestation scheme.	
	v)	Certificates from competent authority regarding suitability of area identified for compensatory afforestation and from management point of View. (To be signed by the concerned Deputy Conservator of forest)	
11)		Site inspection report of the DCF (to be enclosed) especially highlighting facts asked in col. 7(xi, xii), 8 and 9 above.	
12)		Division/District profile:	
	i)	Geographical area of the district	
	ii)	Forest area of the district.	
	iii)	Total Forest area diverted since 1980 with number of cases.	
	iv)	Total Compensatory afforestation stipulated in the district/ division since 1980 onwards	
	a)	Forest land including panel compensatory afforestation.	
	b)	Non-forest land.	
	v)	Progress of compensatory afforestation as on (date)	
	a)	Forest land	
	b)	Non-forest land	
13)		Specific recommendation of the DCF for acceptance or otherwise of the proposal with reasons.	

Date :  
Place :

Signature  
Name  
Official Seal



**Part III**

(To be filled by the concerned Deputy Conservator of Forests)

14)	Whether site, where the forest land involved is located has been inspected by concerned Conservator of forest (Yes/No). If yes, the date of inspection & observation made in form of inspection note to be enclosed.	
15)	Whether the concerned Conservator of forest agree with the information given in part-B and the recommendations of Deputy Conservator of Forests.	
16)	Specific recommendation of concerned conservator of forests for acceptance if otherwise of the proposal with detailed reasons.	

Date :

Signature

Place :

Name &amp; Designation

Official Seal

**Part IV**

(To be filled in by the Nodal Officer or Principal Chief Conservator of Forests or Head of Forest Department)

17)	Detailed opinion and specific recommendation of the state Forest Department for acceptance of otherwise of the proposal with remarks.  (While giving opinion, the adverse comments made by concerned conservator of forest or Deputy Conservator of forests should be categorically reviewed and critically commented upon).	
-----	--	--

Date :

Signature

Place

Name &amp; Designation

Official Seal

**Part V**

(To be filled in by the Secretary-in-Charge of Forests Department or by the other Authorised Officer of the state Government not Below the rank of an Under Secretary)

18)	Recommendation of the State Government: (Adverse Comments made by any officer of Authority in Part - B or Part - C or Part - D above should be specially commenced upon).	
-----	--	--

Date :

Signature

Place

Name &amp; Designation

**Instructions (for Part - I):**

- 1) The project authorities may annex a copy of the approved project/plan in addition to filling Col. I (I) e.g. IBM approved mining plan for major minerals/ CMPDI plan with subsidence analysis reports, etc.
- 2) Map has to be in original duly authentically jointly by project authorities and concerted DCF-Col. I (ii).
- 3) Complete details of alternative alignments examined especially in case of project like roads, transmission lines, railway lines, canals, etc. to be shown on the map with details of area of forest land involved in each alternative to be given is Col. I (iii).
- 4) For proposals relating to mining certificate from competent Authority like District Mining officer about non-availability of the same minerals in surrounding/nearby non-forest areas.
- 5) In case the same company/individual has taken forest land for similar project in the state, a brief detail of all such approvals/leases be given as an enclosure along with current status of the projects.
- 6) The latest clarification issued by the Ministry under Forest (Conservation) Act, 1980 may be kept in mind. In case such information do not fit in the given columns, the same shall be annexed separately.

**General Instruction:**

- 1) On receipt of proposal Nodal Officer shall issue a receipt to the user agency indicating therein the name of the proposal User Agency in hectare, serial number and date of receipt.
- 2) If the space provided above is not sufficient to specify any information, please attach separate details/documents.
- 3) While forwarding the proposal to the central Government complete details on all aspects of the case as per form prescribed above read with the clarification should be given. Incomplete or deficient proposals shall not be considered and shall be returned to the state government in original.
- 4) The state government shall submit the proposal to the Central Government within stipulated time limits. In case of delay while forwarding the reasons for the same to be given in the forwarding/covering letter.

**ANNEX-V**  
(Clause 5.1)

**Form for Investigation/Survey/Diversion in the National Park/Sanctuary**  
(All documents to be submitted in triplicate and signed in Blue ink)

**PART - I**

***Proposal for Investigation and Survey in the National Park/Sanctuary***

*(Details to be provided by the Applicant)*

- 1) Name of the Organization
- 2) Aims and Objectives of the Proposed Project
- 3) Location and Map (1:1,50,000 scale) of the area duly authenticated by the competent authority to be investigated/surveyed
- 4) Whether investigation/survey requires clearing of vegetation
- 5) If yes, please specify the extent (in ha.)
- 6) Opinion of the Officer In Charge of the N.P./ WLS (Attach signed copy)
- 7) Opinion of the Chief Wild Life Warden (Attach signed copy). The following be included in the opinion:
  - i) Brief history of the Protected Area
  - ii) Current status of Wildlife
  - iii) Current status of pressures on protected Areas.
  - iv) Projected impacts of projects on wildlife, habitat management and access/use of resource by various stakeholders.
  - v) Contiguous wildlife areas which would benefit wildlife if added to National park/Sanctuary.
  - vi) Other areas in the State which have been recommended by State Government, Wildlife Institute of India, BNHS, SACON, IISC, IUCN or other expert body for inclusion in Protected Area network.

Signed  
Project Head  
Name  
Organization

Signed  
The Officer In Charge of the N.P./ WLS  
Office Seal

Signed  
The CWLW  
Office Seal

Date of submission to Govt. of India by the CWLW

## **PART - II**

*(To be filled in by the Applicant)*

### **1) Project details:**

- i) Copy of the Investigation and Survey report.  
(The report should include the dates of survey and the names of the investigators, surveyors and all officials of the concerned NP/ WLS who remained present during the period.)
- ii) Self contained and factual project report for which NP/WLS area is required  
(Enclose copy of the Project Appraisal document)
- iii) Map (Duly authenticated by the Divisional/District Head of the Department dealing with Forests and Wild Life) on a scale of 1:1,50,000 showing the boundaries of the NP/WLS, delineating the area in question in red colour).
- iv) Self contained and factual report of atleast two alternatives considered by the project authorities along with technical and financial justification for opting national park/sanctuary area.
- v) Copy of the Bio-diversity Impact Assessment report in case the proposal involves diversion of more than 50 ha. NP/WLS area.
- vi) Location of the project/Scheme
  - a) State/Union Territory
  - b) District
  - c) Name of the National Park/Sanctuary
- 3) Details of the area required (in Hectares only)  
(Provide break-up of the land use under the project e.g., construction of dam, submergence, housing for staff, road etc.)

### **2) Details of displacement of people, if any, due to the project**

- i) Total number of families involved in displacement
- ii) Number of Scheduled Caste/Schedule Tribe families involved in displacement
- iii) Detailed rehabilitation plan



- 3) Any other information relevant to the proposal but not covered in any of the columns above.

Signed by

Project Head

Name

Organization

Date of submission to the Head of the National Park/Sanctuary

### PART - III

*(To be completed by the Officer-in-Charge of the National Park/ Sanctuary completed and submitted to the Chief Wild Life Warden or officer authorized by him in this behalf within 30 days of the receipt of PART - II)*

- 1) Date of receipt of the PART - II
- 2) Total Area (Ha.) of National Park/Sanctuary
- 3) Total area (Ha.) diverted from the NP/WLS so far for development purposes
- 4) List the past projects and the area (Ha.) diverted

Name of Project	Area diverted	Year of diversion
-----------------	---------------	-------------------

- 5) Positive impact/s due to the diversion of area for the projects referred to in column 4 above

Name of the Project/s	Positive impact	Scientific Basis of Assessment
-----------------------	-----------------	--------------------------------

(Attach separate document, if required)

- 6) Negative impact/s due to the diversion of area for the projects referred to in column 4 above

Name of the Project/s	Negative impact	Scientific Basis of Assessment
-----------------------	-----------------	--------------------------------

(attach separate document, if required)

- 7) Management Plan Period

(Attach copy of the Management Plan/Management Scheme/Recommendation of Chief Wildlife Warden)

- 8) List Management actions taken/proposed to be taken in the whole Block/Zone in which the proposed area is located.
- 9) Type of forest in which the proposed area falls.
- 10) Location of the proposed area w.r.t. the critical/intensive wildlife management areas/wildlife habitats. (attach Map to scale)
- 11) List the likely POSITIVE AND NEGATIVE impact/s of the proposed project giving scientific and technical justification for each impact.
- 12) Provide COMPREHENSIVE details of the impact of the proposal in terms of Sections 29 and/or section 35 (6) of the Wild Life (Protection) Act, 1972 as the case may be.
- 13) Whether the project authorities have ever committed violation of the Wild Life (Protection) Act, 1972 or Forest Conservation Act, 1980. If yes, provide the EXHAUSTIVE details of the offence and the present status of the case.  
  
(Concealing or misrepresenting the facts will lead to rejection of the case in addition to any other penalty as prescribed under Law)
- 14) Have you examined the Project Appraisal document and the alternatives as provided in PART - II.
- 15) Have you examined the Bio-diversity Impact Assessment Report.
- 16) If Yes, please give your comments on the recommendations given in the report
- 17) Dates and duration of your field visits to the proposed site
- 18) Do you agree that the present proposal of diversion of NP/WLS area is the best or only option and is viable.
- 19) Any other information that you would bring to the notice of the State Board, National Board or its Committee that may be relevant and assist in decision making
- 20) Do you recommend the project.

*(Please provide full justification to support your recommendations)*

Signed by

The Officer In Charge of the N.P./WLS

Official Seal

Date of submission to the Chief Wild Life Warden or any other officer authorized by him in this regard

## **PART - IV**

*(To be completed by the Chief Wild Life Warden within 15 days  
of the receipt of PART - II and III)*

- 1) Date of RECEIPT of PART II and III by the Chief Wild Life Warden or the officer authorized by him in this regard
- 2) Do you agree with the information and recommendations provided by the Officer-in-Charge in PART - III
- 3) If not, please provide the reasons
- 4) Have you visited the site yourself and held discussions with the applicant.
- 5) Do you agree that the present proposal for permitting use of NP/WLS area is the best option or only option and is viable.
- 6) Please provide specific comments w.r.t. Section 29 of the Wild Life (Protection) Act, 1972
- 7) Any other information that you would bring to the notice of the State Board, National Board or its Committee that may be relevant and assist in decision making
- 8) Do you recommend the project.  
*(Please provide full justification to support your recommendations)*
- 9) Conditions, if any, to be ensured in the interest of wildlife for allowing use of the area.

Signed by

The Chief Wild Life Warden

Name

State

Official Seal

*Date of submission to the State Government*

## **PART - V**

*(To be completed by the Department-in-Charge of Forestry and  
Wild Life in consultation with the State Board for Wild Life  
within 30 days of the receipt of PART - II, III and IV)*

Date of RECEIPT of PART II, III and IV by the Department

Do you agree with the recommendation/s of the Chief Wild Life Warden

If not, please provide the reasons.

IRC:SP:93-2011

Did you provide PART II, III, and IV to the members of the State Board for Wild Life

Attach copy of the opinion of the State Board for Wild Life

Give details of the recommendations of the State Government

Signed by

The Principal Secretary

Name

State

Official Seal

Date of submission to the Central Government



**ANNEX-VI**  
(Clause 4.2-4)

**Format for Obtaining CRZ Clearance**

Note 1 : All information given in the form of annexures should be part of is file itself. Annexures as separate files will not be accepted.

Note2 : Please enter x in appropriate box where answer is Yes/No

**I) General Information**

**A) Name of the Project**

- 1) Existing project/proposed project/  
expansion project/modernization project :
- 2) If Existing/expansion/  
modernization project, whether  
environmental clearance  
has been obtained :

**B) Size. (Plinth Area) : Square Meters**

**C) Location**

Village	Tehsil	District	State

**D) Geographical Information**

1) Survey no.

2) Latitude

3) Longitude

4) Elevation above Mean  
Sea Level (Meters)

- 5) Total Area envisaged for setting up of project (in ha.)
- 6) Nature of terrain
- 7) Nature of Soil (permeability)
- 8) Stability Status of the Coast ,i.e.
- |      |                          |     |                      |                      |    |
|------|--------------------------|-----|----------------------|----------------------|----|
| i)   | Is it stable?            | Yes | <input type="text"/> | <input type="text"/> | No |
| ii)  | Is it accreting?         | Yes | <input type="text"/> | <input type="text"/> | No |
| iii) | Is it eroding?           | Yes | <input type="text"/> | <input type="text"/> | No |
| iv)  | Is it prone to flooding? | Yes | <input type="text"/> | <input type="text"/> | No |
- 9) Nature of Coast, i.e.,
- |      |                         |                      |
|------|-------------------------|----------------------|
| i)   | Rocky                   | <input type="text"/> |
| ii)  | Sandy                   | <input type="text"/> |
| iii) | Others (Please specify) | <input type="text"/> |

## II) Current land use of the proposed project site Area (in hectares)

### A) Agricultural

- |    |             |                      |
|----|-------------|----------------------|
| 1) | Irrigated   | <input type="text"/> |
| 2) | Unirrigated | <input type="text"/> |

### B) Homestead

### C) Forest

### D) Notified Industrial Area/Estate

### E) Grazing

### F) Fallow

### G) Mangroves

H) Orchards	
I) Sand dunes	
J) No development zone	
K) Marshes	
L) Others(Please specify)	
Total	

**III) Alternate sites considered from environmental consideration**

A) \_\_\_\_\_

B) \_\_\_\_\_

C) \_\_\_\_\_

D) \_\_\_\_\_

**IV) Reason for selecting the proposed site from environmental consideration.**

**V) Does the proposed project site conform to the stipulated land use as per the local land use plan ?**

Yes ☐ No ☐

**VI) What is the categorization of the area (as per approved CZMP)?**

CRZ-I ☐ CRZ-II ☐ CRZ-III ☐

CRZ-IV ☐

**VII) Does the proposed activity qualify under the category of permissible activity ?**

Yes ☐ No ☐

If yes, under what provision is it permitted ?

S.No.	Provision No.

**VIII) Does the proposed project site involve any breeding or nesting ground ?**

Yes

No

If yes, provide the following details:

- A) Name of the aquatic organism
- B) Type of habitat
- C) Period of year in which activity takes place

**IX) Site preparation.**

- A) Is the proposed site located in low-lying area?

Yes

No

- B) Level before filling (above MSL, in m)
- C) Level after filling (above MSL, in m)
- D) Details of fill material

Quantity of Fill Material required (in cu. m.)	Source

- E) Does the site preparation require cutting of trees ?

Yes

No

- F) If yes, how many trees are proposed to be cut ?

- 1) Does it include any protected/endangered species (as per BSI list) ?

Yes

No

- 2) If yes, provide detail.



G) Does the project involve construction on any sandy stretch?

Yes

No

If yes, please furnish detail.

H) Height (above MSL in m.)

I) Does the project involve extraction of sand, leveling or digging of sandy stretches within 500 meters of high tide line

Yes

No

If yes, mention the activity involved and area.

1) Activity

2) Area (sq. meters)

J) Does the project involve any land reclamation?

Yes

No

If yes, pl. provide the following details.

1) Activity for which land to be reclaimed

2) Area of land to be reclaimed (ha)

K) Does the project involve any dredging?

Yes

No

If yes, provide details (capital/maintenance, extent of dredging, disposal of dredged material etc.)

L) Is any sand proposed to be removed from sand dunes?

Yes

No

M) Whether there will be any change in the drainage pattern after the proposed activity ?

Yes

No

If yes, what are the changes?

N) Does the project involve cutting/clearing of mangroves?

Yes

No

If yes, give detail

Area (ha)

Species

Existing health

O) Whether there will be any ingress of saline water into ground/surface water/soil due to project ?

Yes

No

**X) Please indicate area earmarked for each of the following (in Square meters)**

S.No.		0-200 mt	200-500 mt	Beyond 500 mt
1)	Area of all buildings			
2)	Courts			
3)	Playground			
4)	Swimming pool			
5)	Lawns			
6)	Amusement park			
7)	Landscaping			
8)	Approach Road			
9)	Tree plantation			
10)	Waste water treatment			
11)	Solid waste disposal			
12)	Others (Please specify)			
TOTAL				

**XI) Project Details.**

A) Total Area of the plot (in square meters)

1) Area within 200 mts of HTL

2) Area between 200-500 mts of HTL

3) Area beyond 500 mts of HTL

B) Width of the plot along the coastline (in meters)

C) Width of access road to the beach through the property on either side of the Hotel/Beach Resort left for public access (in meters)

1) Left side

2) Right side

D) If the width of the plot along the coast is more than 500 meters, whether additional public access to the beach has been provided through the property ?

Yes

No

If yes,

1) Width of public access road (in meters)

2) Area of public access road (in meters)

3) Distance along the coastline between two public access roads to the beach (in meters)

E) Details of Buildings to be constructed (layout to be provided)

No. of buildings	Area of each building (Sq.meters)	Distance from HTL (meters)	Height of each building (meters)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

F) Floor space index/Floor space area (In meters).

- |    |   |                      |
|----|---|----------------------|
| 1) | Ground coverage between 200-500 meters of HTL | <input type="text"/> |
| 2) | Coverage of first floor                       | <input type="text"/> |
| 3) | Total floor area (1+2)                        | <input type="text"/> |
| 4) | 50% of plot area within 200 meters of HTL     | <input type="text"/> |
| 5) | Plot area between 200-500 meters of HTL       | <input type="text"/> |
| 6) | Total (4+5)                                   | <input type="text"/> |
| 7) | Floor space index (3/6)                       | <input type="text"/> |

G) Is it proposed to construct any basement?

Yes  No

If yes,

- |    |   |  |
|----|---|--|
| 1) | Depth of Basement (meters)                            | <input type="text"/>                             |
| 2) | Area of basement (Sq. meters)                         | <input type="text"/>                             |
| 3) | Activity/Purpose                                      | <input type="text"/>                             |
| 4) | Maximum Ground water Table (meters)                   | <input type="text"/>                             |
| 5) | Has the approval of Ground Water Board been obtained? | Yes <input type="text"/> No <input type="text"/> |

H) Whether construction would be consistent with the surrounding landscape and local architecture?

Yes  No

If no, reason for adopting different architectural style may be specified.

I) Number of rooms to be constructed

- |    |              |                      |
|----|--------------|----------------------|
| 1) | Ground floor | <input type="text"/> |
| 2) | First floor  | <input type="text"/> |



**XII) Details of the location:**

	Sea*	Other Water bodies Rivers/creek/lake etc*. (Please specify)
Distance of seaward boundary of the plot (in m)		
Distance of seaward boundary of construction (in m.)		

\* From high tide line

**XIII) Surroundings.**

- A) Whether there are any structures existing within 1 km of the periphery along shore of the proposed site?

Yes

No

- B) If yes, please provide details along with a layout plan:

- 1) Distance of each structure from the boundary of the proposed site

- 2) Distance of each structure from the HTL

- 3) CRZ classification as per approved CZMP

**XIV) Whether any of the following exist within 7 km of the periphery of the project site. If so, please indicate aerial distance and the name of the site.**

S.No.		Name	Aerial Distance (in km)
1)	National Park		
2)	Marine Park		
3)	Sanctuary/Tiger Reserve/Elephant Reserve/ Turtle Nesting Ground		

S.No.		Name	Aerial Distance (in km)
4)	Core Zone of Biosphere Reserve		
5)	Reserved Forest		
6)	Wildlife Habitat		
7)	Habitat of endangered/exotic species		
8)	Coral Reef		
9)	Mangroves		
10)	Lakes/Reservoirs/Dams		
11)	Breeding Site		
12)	Nesting Site		

**XV) Transportation system****Type****Transportation System****Road****Rail****Airport**

A) Existing

B) After the proposed activity

C) Whether existing network is adequate

Yes

☐

No

☐

D) If not, provide details of alternative proposal

**XVI) Raw material transportation to the site , (Quantity in tonnes per day)****A) During construction**

S.No.	Item	Quantity	Mode of Transportation
1)	Brick		
2)	Sand		
3)	Steel		
4)	Others (Please Specify)		

**B) After construction**

	No of trips/day	Mode
Material	<input type="text"/>	<input type="text"/>
Manpower	<input type="text"/>	<input type="text"/>

**XVII) Whether the area is affected by cyclone**

Yes

No

If yes provide

A) Maximum wind speed reached

B) Frequency of cyclone

C) Distance affected from high tide line

**XVIII) Ambient Air Quality (for RPM, SPM, SO<sub>2</sub>, NO<sub>x</sub>, CO)**

Procedures adopted should be as per guidelines of CPCB and should cover one full season excluding monsoon.

Date, Time & Location	Concentration as monitored (in g/cu.m.)  SPM, SO <sub>2</sub> , NO <sub>x</sub> , CO	Permissible Standard(As per SPCB guidelines)	Remarks (Name of the instrument and sensitivity)

**XIX) Water Requirements (cum./day)**

Purpose	Avg. Demand	Peak Demand	Source	Type Treated/ untreated/Fresh/ Recycled	Remarks
<b>A) Project Area</b> 1) Washing 2) Dust suppression 3) Drinking 4) Green Belt 5) Fire Service 6) Others (Pl. Specify)					
<b>B) Township Area</b> 1) Green Belt 2) Drinking 3) Other (Please Specify)					

TOTAL

**XX) Source of Raw Water Supply (Net)**

S.No.	Source	Cu.m./hr	Cu.m./day
1)	Sea		
2)	River		
3)	Ground water		
4)	Rain water harvesting		
5)	Municipal water supply		
6)	Others (Pl. specify)		



**XXI) In case of groundwater from Dug wells in the CRZ area**

A)	No. of wells(existing) within	No.	Yield (kl/day)
1)	0-200 meters	<input type="text"/>	<input type="text"/>
2)	200-500 meters	<input type="text"/>	<input type="text"/>
B)	New wells (proposed) within		
a)	0-200 meters	<input type="text"/>	<input type="text"/>
b)	200-500 meters	<input type="text"/>	<input type="text"/>

**XXII) Lean Season flow in case of surface water (cum./sec)****XXIII) Groundwater** A) Recharge Rate (cubic meters)

## B) Withdrawal rate (cubic meters)

## Ground water Table: A) Pre monsoon (meters BGL)

## B) Post monsoon (meters BGL)

**XXIV) Competing Users of the Water Source**

S.No.	Usage	Present Consumption (cu.m/day)		Addition Proposed as per local plan		Total	
		Surface	Ground	Surface	Ground	Surface	Ground
1	Irrigation						
2	Industry						
3	Drinking						
4	Others (Please specify)						
Total							

**XXV) Physico chemical analysis of Raw Water at intake point****XXVI) Physico chemical analysis of treated water to be used in the Project/ Township (Envisaged Standards).**

**XXVII) Waste Water Management**

- A) Waste water and /or sewage treatment plan
- B) Composition/characteristics of discharge before and after treatment

Item	Characteristics	
	Before	After

- C) Daily discharge (cu.m./day) from different sources

1)	Toilet/sewage	<input type="text"/>
2)	kitchen	<input type="text"/>
3)	Workshop	<input type="text"/>
4)	Other	<input type="text"/>
	Total	<input type="text"/>

- D) Quantity of water recycled

1)	(in %)	<input type="text"/>
2)	(in cu.m./day)	<input type="text"/>

- E) Details of recycling mechanism

- 1) During monsoon season
- 2) Other than monsoon season

- F) Mode of final discharge/disposal

S.No.	Mode	Length (in m.)	Quantity(in cu.m./day)
1)	Open Channel		
2)	Pipeline		
3)	Others (Please specify)		

G) Point of final discharge :

S.No.	Final Point (please specify the location)	Quantity discharged (in cum.)/day
1)	Agricultural land	
2)	Fallow Land	
3)	Forest Land	
4)	Green Belt	
5)	River	
6)	Lake	
7)	Estuary	
8)	Sea	
Total		

H) Lean season flow rate in case of  
river/stream/creek (cumecs)

I) Downstream users of water (cusecs/cumecs)

1) Domestic

2) Irrigation

3) Fisheries

4) Others (Please specify)

Total

J) Analysis of river water 100 meters upstream of discharge point and  
100 meters downstream of discharge point and details of aquatic life  
in case of discharge into water bodies.

**XXVIII) Solid Waste**

## A) Details

S.No.	Source	Qty (TPM)	Form	Composition
1)	Raw Water treatment			
2)	ETP			
3)	Others			

B) What are the possibilities of recovery and recycling of wastes?

C) Possible users of Solid Waste.

D) Method of disposal of solid waste

Method

Qty (TPM)

E) Landfill

F) Incineration

G) Other (pl. specify)

H) In case of landfill

1) Is solid suitable for landfill

Yes

No

2) Dimensions

3) Life of landfill (years)

4) Proposed precautionary and mitigation measures

I) In case of incineration:

Details of incinerator

1) Size

2) Capacity

3) Fuel



J) Likely composition and quantum of emissions

S.No.	Components	Quantity (in cu.m/hr)

K) Frequency of incineration/annum

L) Others alternative proposed along with details

### XXIX) Noise level (dB)

A) Source

B) Level at Source (db)

C) Level at project boundary (dB)

D) Abatement measures

### XXX) Fuel/Energy Requirements

A) Total Power Requirement (MW)

S.No.		Project	Other(please specify)
1)	Present (in existing)		
2)	Proposed		
Total			

B) Source of Power (MW)

S.No.		SEB/Grid	Captive power plant	DG Sets
1)	Present			
2)	Proposed			
Total				

## C) Details of Fuel used

S.No.	Fuel	Daily Consumption (TPD)		Calorific value	% Ash	% Sulphur
		Existing	Proposed	(Kcals/kg)		
1)	Naphtha					
2)	HSD					
3)	LSHS					
4)	Furnace Oil					
5)	Coal					
6)	Lignite					
7)	Other (Please specify)					

**XXXI) Occupational Health**

- A) What are the major occupational health and safety hazards anticipated
- B) What provisions have been made/propose to be made to conform to health/safety requirements.
- C) Details of personal protective equipment provided/to be provided to the workers

**XXXII) Green Belt**

- A) Total area of project / township (in ha.)
- B) Area already afforested (for existing projects), in ha.
- C) Area proposed to be afforested (in ha.)
- D) Width of green belt (minimum, in m.)

## E) Trees planted &amp; proposed

	Nos.	Survival Rate	Species
Planted	<input type="text"/>	<input type="text"/>	
Proposed	<input type="text"/>		
Major species	<input type="text"/>		

**XXXIII) Construction Phase**

## A) Estimated duration of construction

## B) Number of persons to be employed for construction

a) Peak	<input type="text"/>
b) Average	<input type="text"/>

## C) What provision has been made for the sewage treatment for the construction workers?

## D) How the fuel (kerosene/wood, etc.) requirement of labour force will be met to avoid cutting of trees from the adjoining areas

## E) Measure for Health care with emphasis on protection from endemic diseases.

**XXXIV) Socio-economic profile**

## A) Human Settlement

S.No.		Aerial distance from the periphery of the site		
		Upto 500 m from periphery	500 m to 3000 m from the periphery	3000 m to 7000 m from the periphery
1)	Population	<input type="text"/>	<input type="text"/>	<input type="text"/>
2)	Number of Houses	<input type="text"/>	<input type="text"/>	<input type="text"/>
3)	Present Occupational Pattern	<input type="text"/>	<input type="text"/>	<input type="text"/>

## B) Economic activity

S. No.	Population	Occupation (Agriculture/horticulture/ fishing/ tourism/transport/ construction)	Average Income per annum

**XXXV) Rehabilitation & Resettlement plan**

## A) Population to be displaced

S.No.	Name of Village	Population		
		Land oustees only	Homestead Oustees only	Land and Homestead Oustees
1)				
2)				
3)				

## B) Rehabilitation Plan for oustees

## C) Site where the people are proposed to be resettled and the facilities to be provided at the new site

## D) Compensation package

## E) Agency/Authority responsible for their resettlement.

## F) Approval/comments of competent authority

**XXXVI) Pollution Control**

## A) Details of Pollution Control Measures/Environmental safeguards:

S.No.	Existing	Proposed to be Installed
1)	Air	
2)	Water	
3)	Noise	
4)	Solid Waste	



## C) Protection of :

- 1) Forest
- 2) Agricultural land
- 3) Grazing land
- 4) Top soil
- 5) Natural resources
- 6) Sand dune
- 7) Hill feature
- 8) Reclaiming borrow lists
- 9) Low lying list
- 10) Soil and slope stabilization

## D) Preventing siltation

## E) For Existing Units Only

- 1) Difficulties encountered in implementing pollution control measures.
- 2) Efficiency of each pollution control equipment/system installed.

S.No.	Name of the System Equipment	Design Efficiency %	Present Working efficiency %
1)			
2)			
3)			

**Proposed Units**

S.No.	Name of the System Equipment	Design Efficiency %	Present Working efficiency %

**XXXVII) Expenditure on Environmental Measures**

- A) Capital cost of the project (as proposed to the funding agency/financial institutions

(Rs. Lakhs)

## B) Cost of environmental protection measures (Rs. Lakhs)

S.No.		Recurring Cost per annum	Capital Cost
1)	Pollution Control		
2)	Pollution Monitoring		
3)	Solid Waste Management		
4)	Occupational Health		
5)	Green Belt		
6)	Others ( Pl. Specify)		
Total			

## XXXVIII) Public Hearing

- A) Date of Advertisement:
- B) Newspapers in which the advertisement appeared
- C) Date of Hearing
- D) Panel Present
- E) List of Public present along with addresses and occupation
- F) Summary/details of public hearing

Issues raised	Recommendation of panel	Response of Project Proponents

The data and information given in this Performa are true to the best of my knowledge and belief:

Signature of the Applicant with  
full name & address.

Date:

Place:

Given under the seal of organisation  
on behalf of whom the applicant  
is signing.

**LIST OF DOCUMENTS TO BE ATTACHED IN RESPECT OF PROJECTS  
FALLING WITHIN COASTAL REGULATION ZONE**

<b>S. No</b>	<b>Document to be attached</b>
1)	Location Map delineating LTL HTL, 200 meter line, 500 meter line, and extent of Coastal Regulation Zone as per Naval Hydrographer Chart / Chief Hydrographer demarcation duly certified by the competent authority
2)	Topographic map of the site (1:2500 scale) indicating contours sand dunes and ecologically sensitive features.
3)	Confirmation from the Department of Environment of the State Government/ Union Territory Administration indicating the classification of the area, their observation/ recommendation on the proposal and confirmation that the proposal is as per the approved Coastal Zone Management Plan
4)	Topographic map covering 10 kilometers radius from the periphery of the site indicating mangroves, mudflats, nesting grounds for aquatic animals, migration path of turtles and other ecologically sensitive areas.
5)	General Lay out of the site (1:2500 Scale) showing installations already developed, approach roads and other infrastructure facilities constructed/ Planned for the project, location of dug wells, sand dunes, effluent treatment facilities/Septic tank, courts, Lawns, tree plantation, Swimming pool etc. and their distance from High Tide Line.
6)	Comments/observation of the Chief Wildlife Warden
7)	Plan of the area showing existing structure within one kilometer
8)	Plan /Elevation of the buildings proposed clearly demarcating the access road to the public on either side of the proposed construction if it is a beach resort/ hotel in accordance with the provisions of the guidelines given in CRZ notification.
9)	Approval of Electricity connection and certificate of supply of electricity
10)	Lay out of green belt clearly indicating the width on all side's trees, lawns, bushes etc.
11)	Approval of Tourism Department
12)	No objection certificate from the State Pollution Control Board
13)	No objection certificate from the State Ground water Board
14)	A certificate from water supplies authority regarding its availability in case water from other sources is to be obtained.

**ANNEX–VII**

**Form VII**

**Application for Licence for Mining Operation/Construction  
within a Regulated Area (See Rule 34)**

- 1) Name and address of applicant<sup>1</sup>
- 2) Name of the monument near or adjoining which the regulated area is situated.  
Locality                      District                      State
- 3) Nature and details of the proposed mining operation/construction in respect of which permission is sought  
  
(In the case of mining operation, a site-plan in triplicate showing in red outline, the extent of the operation in relation to the monument and the regulated area should be attached: and the details regarding the depth down to which the operation is to be carried out, the mode of the operation, the method of the muffling of sound, the kind and charge of blasting material and the depth and number of blast-holes to be fired at a time should be specified.  
  
In the case of construction, a site-plan in triplicate showing in red outline the location of the building in relation to the monument and the regulated area and the plan and elevation of the building should be attached; and the colour, external appearance and method of the screening of the building and the depth down to which the soil will be excavated for the appurtenances of the building should be specified.)
- 4) Purpose of the proposed mining operation/construction
- 5) Approximate duration and date of commencement of the proposed mining operation/construction

I declare that the above information is correct. I also undertake to observe the provisions of the Ancient Monuments and Archaeological Sites and Remains Act 1958, and the rules thereunder.

**Station**

**Seal of the Organisation**

**Date**

**Signature of the Applicant<sup>2</sup>**

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<sup>1</sup> If the application is on behalf of an organization, the name thereof should be given.

<sup>2</sup> If the application is on behalf of an organization, the signature should be that of the head of that organization.



## Bibliography

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  - Environmental Impact Assessment Guidance Manual, Highways February-2010 Administrative Staff College of India, Hyderabad.
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**(The Official amendments to this document would be published by the IRC in its periodical, 'Indian Highways' which shall be considered as effective and as part of the code/guidelines/manual, etc. from the date specified therein)**